SYSTEM TRAINING PLAN (STRAP)

FOR

PATRIOT/PATRIOT ADVANCED CAPABILITY PHASE III (PAC-3)

AIR DEFENSE ARTILLERY MISSILE SYSTEM

DATE: Nov 96

US ARMY AIR DEFENSE ARTILLERY SCHOOL
DIRECTORATE OF TRAINING MANAGEMENT
PLANS AND STRATEGIES BRANCH
FORT BLISS, TEXAS 79916-0002

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1. SYSTEM DESCRIPTION1. SYSTEM DESCRIPTION.

a. Patriot. Patriot is a high-to-medium altitude, long range, mobile, air defense artillery (ADA) missile system which provides air defense for ground combat forces and high-value assets against the air and antitactical missile threat. Patriot-unique equipment at the Headquarters and Headquarters Battery (HHB) includes the information and coordination central (ICC), communications relay groups (CRGs), antenna mast groups (AMGs), trailer mounted electric power units (EPUs), and guided missile transporters (GMT). The Patriot firing battery equipment includes the AMG, radar set (RS), engagement control station (ECS), truck mounted electric power plant (EPP), and up to sixteen launching stations (LSs). Both the battalion and firing batteries are equipped with a semitrailer maintenance center.

(1) The ICC is manned during air battle operations and provides necessary command and control links to interface with higher echelon, lateral and subordinate battalions, and its own firing units.

(2) The ECS is the only manned station in the battery during the air battle and is the operations control center of the Patriot battery. The ECS contains the weapons control computer (WCC), man/machine interface and various data and communication terminals. Its prime mover is a 5-ton tactical cargo truck.

(3) The RS is a multifunction, phased-array radar mounted on an M860 semitrailer. The prime mover is an M983 10-ton heavy expanded mobility tactical truck (HEMTT) tractor.

(4) The LS is a remotely operated, fully self-contained unit, carrying integral on-board power. The launcher is mounted on an M860 semitrailer towed by a M983 HEMTT 10-ton tractor. Each LS may be loaded with four PAC-2 missile rounds (MRs), or 16 PAC-3 missile rounds if the LS is PAC-3 modified. The MR consists of a Patriot missile mounted within a sealed aluminum canister that functions both as a shipping and storage container and as a launch tube. Canisters are either single or 4-packs and are mounted two by two on the launcher.

(5) The CRG provides a multi-routed, secure, two-way data relay capability between the ICC and its assigned fire units and adjacent units. The CRG also provides the capability for both data and voice exit and entry point communications with elements external to the Patriot ADA battalion.

(6) The AMG consists of four ultra high frequency (UHF) antennas used for communications between the ICC, CRG, ECS and adjacent units and or higher echelons. The AMG can be remotely controlled in azimuth from within the ECS.

(7) The EPP consists of two 150-kw generator sets, a power distribution unit (PDU), cables, and accessories mounted on a modified HEMTT. The PDU is stored between the generators and contains a parallel powerbus and power contractors to supply prime power to the ECS and RS.

b. Planned Improvements. Planned Improvements: (see Figure 1 for milestones)

(1) The Patriot Advanced Capability Phase III (PAC-3) program is a major system upgrade consisting of integrated, complementary improvements required to execute ADA missions in support of AirLand Operations against current and evolving third dimension threats. A concise description of each product improvement is available in the System Improvement Plan (SIP).

(a) A new missile will provide Patriot the capability to remain effective against threats into the next century, under the operational requirements in the PAC-3 ORD.

1 PAC-3 missile. The PAC-3 missile is a smaller and highly efficient missile. The canister is approximately the same size as a PAC-2 canister but contains four missiles and tubes instead of a single round. Selected Patriot launching stations will be modified to accept PAC-3 canisters.

(2) Battalion Tactical Operations Center (BTOC). The BTOC is an M900 series 5-ton expandable van that has been modified by the addition of data processing and display equipment, and utilized by the battalion staff to command and control the Patriot battalion. The BTOC allows the staff to perform automated tactical planning, communications link planning, and to display situational awareness information.

c. Army Modernization Information Memorandum (AMIM) Number.
Army Modernization Information Memorandum (AMIM) Number: IO11.

d. New Equipment Training Plan (NETP). New Equipment Training Plan (NETP): MIC 93008 (Config I), MIC 94002 (Config II), and MIC (PDB-4).

e. FUE Date. FUE Date: Jan 83. (PAC-3, Sep 99)

2. ASSUMPTIONS2. ASSUMPTIONS. DA will provide the necessary personnel and equipment required to support the programs of instruction (POI) for Patriot.

3. TRAINING CONCEPT3. TRAINING CONCEPT.

a. General. General. Crew members, operators, and unit maintainers {MOS 14T, 14E, 140E and Specialty Code (SC) 14E}, receive initial training at the USAADASCH, Fort Bliss, Texas. Intermediate maintenance (IM) personnel (MOS 27X and 916A6D) receive Phase I, special digital electronics, training at USAOMMCS, Redstone Arsenal, AL. The Phase II, system maintenance, troubleshooting, and repair is conducted by USAOMMCS at Ft Bliss, TX. PAC-3 operational and maintenance concept changes resulting from software and hardware changes will be incorporated into institutional and unit sustainment training. PAC-3 upgrades will affect the 14E, 140E and 14T courses at Fort Bliss, Texas. Upgrades will also affect 27X and 916A courses conducted by the United States Army Ordnance Missile Munitions Center and School (USAOMMCS) at Fort Bliss. PAC-3 changes impact sustainment training and will require changes to embedded and stand-alone training devices associated with battle management, fire control, launcher operation, maintenance communications. Net is required for all Patriot personnel. The training material will be developed in accordance with TRADOC Regulation 350-70, (Training Development Management, Processes, and Products).

(1) The USAADASCH objective is to provide initial training to standard on the maximum number of individual tasks commensurate with resources available. Additionally, an exportable training package will provide initial and sustainment training on those tasks not trained at USAADASCH. Training will be conducted using a complementary mix of actual equipment and training devices. For detailed information see Figure 2.

(2) The USAOMMCS objective is to provide training to standard on 100 percent of the individual tasks. For detailed information on courses taught at USAOMMCS see Figure 3.

b. Resident and Extension Course Material. Resident and Extension Course Material. Resident course material, extension training material (ETM), soldier training publications (STPs), and POIs will be developed by proponent TRADOC schools for individual training as appropriate. The resource summary is at Figure 4. Resident course material, ETM, STPs, and army training evaluation program (ARTEP) development are shown on TRADOC Form 569-R, Figure 5, system milestone schedule.

c. Individual Training. Individual Training. Training for the Patriot missile system is accomplished through MOS producing courses of instruction at USAADASCH, USAOMMCS, and US Army Ordnance Center and School (USAOC&S). The training prepares soldiers, leaders, and units to fight as members of the combined arms team and prepares them to execute the combined arms mission without additional training or lengthy training adjustment periods. Training is battle-focused, derived from wartime

missions, and based on approved doctrine.

(1) This training is performance-oriented and emphasized hands-on practice of skills and performance required for ADA soldiers to achieve and sustain proficiency of individual tasks to established standards in accordance with soldier's manual (SM), trainer's guide (TG), military qualification standard (MQS), and drill books (DBs). Training incorporates maintenance, safety, and damage or destruction of gear and equipment.

(2) Training aids, devices, simulations, and simulators (TADSS) is the most cost effective and efficient means possible for real-time training. Actual equipment is used to validate the transfer of learning from device to the actual equipment. When required, ranges and targets are used for training. The ranges and targets are realistic representations of the threat; duplicate or replicate the time, movement, countermeasure, signature (including number), exposure times, and hit/kill indications; and provide feedback and performance scoring capability. Ranges and targets are environmentally nondestructive and may be used to train using live fire and simulated firings.

(3) Sustainment of individual tasks in the unit is accomplished using an array of embedded trainers found in the tactical software. In most cases these trainers require only the computer and communications portion of the system to run a training scenario.

d. Combined Arms Training Strategy (CATS). Combined Arms Training Strategy (CATS). CATS is the Army's training strategy which trains the total Army to operate effectively as a combined arms force and it is the driver behind training resource procurement, development, and management. CATS helps leaders allocate resources based on how units train. It also provides a recommended method to maintain soldier and unit proficiency. CATS evolved from the need for more efficient training based on expected resource reductions which increased emphasis on the use of TADSS to support this training.

(1) The Patriot battery gunnery program is designed to develop and test the proficiency of the individual, the crew, and the battery in gunnery techniques. It prepares individuals, crews, and units to execute their mission in combat.

(2) Battery gunnery tables provide mandatory qualification standards and training strategies for the weapon system. The tables focus on preparing the individual to perform as part of a standardized crew and the crew to perform as part of a firing battery in a battalion integrated exercise. Standards are considered as minimum acceptable levels of performance.

Battery crews consist of the tactical control officer (TCO), tactical control assistant (TCA), and the launcher crew consisting of the crew chief and two launcher crew members. The system requires other crews to support mission accomplishment, such as the AMG, EPP and RS crews. The gunnery tables train individuals to perform as crew members and prepare the Patriot battery for the identification and engagement of hostile targets in accordance with NATO/National/Contingency command directives. These tables are arranged in three groups: basic, intermediate and advanced.

(3) Basic Gunnery Tables (Tables I through IV), Figure 8. These tables prepare individual crew members for site-manning duty and instill basic air defense (AD) management skills necessary to progress to the intermediate gunnery tables. Tables I through IV are mandatory for all battery system crew members and will be completed within 90 days of arrival at the unit. Crew members failing to pass Table IV will perform Tables I through III until the standards are met. An ECS crew member (excluding 31R) shall receive a score of at least 90 percent on the battalion tactics examination and satisfactorily pass the crew drill on Table IV-- before advancing to the intermediate level.

Standards: Crew members perform all actions required to prepare the battery to participate in an integrated AD battle.

(4) Intermediate Gunnery Tables (Tables V through VIII), Figure 8. These tables train crews to march order, emplace, and generate a Patriot battery and to conduct AD operations in the centralized, independent, and autonomous modes of operations. The following evaluation procedures and standards apply when performing Tables V through VIII. Tables must be evaluated and critiqued upon completion. Table V and VI mutually support accomplishment of Table VIII. Table VI, basic march order and emplacement practice under daylight and NBC conditions, may be accomplished on site or at an available local training area (LTA). Table VI requires actions for the preparation for travel, the emplacement, and preparation for air defense operations of the system to support a state of emission control (SOE). Table VII, a practice table combining all tasks from Tables V and VI, should be performed in an LTA, but may be performed on site. Table VIII, the evaluation for the intermediate gunnery tables, should be conducted as part of a battery or battalion field training exercise (FTX). Table VIII is a prerequisite for Tables IX through XII and crews failing to pass Table VIII will perform Tables V through VII until the standards are met. Tables VII and VIII should be accomplished during daylight and varying NBC conditions.

(5) Advanced Gunnery Tables (Tables IX through XII).

Figure 8. These tables train crews to march order, emplace, initialize and prepare the system to conduct AD operations in the centralized, decentralized, and autonomous modes of operations. Tables IX through XII are conducted whenever a crew progresses through the Table VIII "gate". Tables IX through XI may be conducted by a crew that has previously validated at Table VIII. Tables IX and X mutually support accomplishment of Table XII. Table XI, practice table combining all tasks from Tables IX and X, should be performed at an available LTA. Table XII, evaluation for the advanced gunnery tables, should be conducted as part of a battalion FTX. Table XII may be conducted as part of a higher headquarters evaluation. Crews failing to pass Table XII will continue to perform Tables IX through XI until the standards are met.

e. Unit/Sustainment Training. Unit/Sustainment Training (Figure 6). Unit/sustainment training has three major components/elements: soldier training, maneuver, and gunnery.

(1) Soldier Strategy (Figure 7). The soldier training element provides an annual plan for training and maintaining skills at the individual level and lists the resources needed to train a soldier. Each unit must design their training based on their mission essential task list (METL). Unit personnel will train an event to standard before moving to the next event within each level or exercise [drills, situation training exercise (STX), FTX, etc]. Training is accomplished using a mix of TADSS, live fire, and end-item equipment. The mix of resources and local facilities determine how the events are trained.

(2) Gunnery Matrix (Figure 8). The gunnery tables provide mandatory qualification standards and training strategies for the system. The tables focus on preparing the individual to perform as part of a standardized crew and the crew to perform as part of a battery or battalion in integrated exercises. Every individual is required to perform each table to a given standard within the required time. Individuals who fail to pass the last table in a particular gate will perform all preceding tables until they pass that gate. Figure 9 provides the gunnery strategy.

(3) Maneuver Training Strategy (Figure 10). Gunnery, command and control, and maneuver exercises integrated into battle-focused training make up the maneuver strategy. The training includes basic crew qualification, air defense exercise (ADX), intermediate battery qualification, and advanced crew qualification events over a twelve-month period, utilizing local training and maneuver areas. These events support an integrated set of METL related training requirements. The unit progresses from individuals to crews participating in battery, battalion, and higher level combined exercises.

4. TRAINING CONSTRAINTS4. TRAINING CONSTRAINTS.

a. Training implementation for each phase of the PAC-3 system improvements is restricted to existing courses and POIs. Incorporation of changes into the POIs will not change the length of existing 14E, 14T, 140E, and officer basic course (OBC) courses.

5. NEW EQUIPMENT TRAINING (NET) STRATEGY SUMMARY5. NEW EQUIPMENT TRAINING (NET) STRATEGY SUMMARY.

a. Strategy. Strategy. An evolutionary process of course development will be maintained through the PAC-3 programs. NET will include Instructor and Key Personnel (I&KP) training, providing a base for TRADOC resident courses. Developmental testing (DT), initial operational test and evaluation (IOT&E), will be provided by the respective Growth Program managers under the Engineering Services Memorandum (ESM) contract. NET will be provided to units when system modification takes place. Doctrine and tactics training (DTT) will be an integral part of the PAC-3 NETP. Target audience is the commander and staffs of involved commands. A TRADOC member will conduct DTT and provide units a doctrine and tactics training impact packet (DTIP) for initial sustainment training. Tasks trained will include threat, employment and deployment capabilities, and characteristics of PAC-3 changes. DTT will be developed and taught for each phase of the PAC-3 program. Distance learning will be used in the form of a training support package for DTT training taking place outside of USAADASCH. The training support package will be tailored to the needs of the receiving unit.

b. Training Support Requirements. Training Support Requirements.

(1) An instructor (senior NET representative) will be provided when required.

(2)

Items required	Currently on hand
FM 44-85	yes (final draft)
FM 44-85-1	yes (initial draft)
FM 44-85-2	yes
FM 44-100 (Jun 95)	yes
Institutional/POI	yes
Instructors	yes
MQS, SM, TG	yes
ST 44-85-1 (PDB-3 DTIP)	yes
ST 44-85-2 (QRP DTIP)	yes
ST 44-85-3 (Config I, II)	yes
ST 44-85-3 (Config III)	draft

(3) Impact. The introduction of the PAC-3 missile system has implication on joint service and Army wide doctrine and will impact on exercises and war gaming.

(4) Details concerning implementation of DTT will be provided in Patriot NETP MIC 93008 (Config I), MIC 94002, (Config II).

6. TRAINING DEVICES/SIMULATORS/SIMULATIONS6. TRAINING DEVICES/SIMULATORS/SIMULATIONS.

a. Training Aids and Instructional Media Requirements. Training Aids and Instructional Media Requirements. Requirements will include type, time frame, and date required. Training aids, such as mock-ups and graphic training aids, will be required to support resident training as course modifications are developed. For additional information see Figure 5.

b. Institutional Training Devices. Institutional Training Devices. The following devices are used only for institutional training.

(1) Patriot Organizational Maintenance Trainer (POMT). The POMT consists of an active maintenance trainer simulator (AMTS) and a part task trainer (PTT). The AMTS consists of ECS and RS simulators. The PTT consists of three display and control consoles and three final modulator power supplies. The POMT provides the institution a method for training maintainers (MOS 24T and 140E) to the required level of proficiency in the use of display-aided and manual maintenance procedures. This is done through the use of selected maintenance tasks associated with the RS, ECS, and ICC.

(2) Radar Set (RS) March Order and Emplacement (MO&E) Trainer. The RS MO&E trainer is used to train Patriot RS MO&E tasks. It is made up of a tactical RS trailer, outriggers, and shelter, minus electronic components of the radar system. The trainer has the necessary power distribution system needed to rotate and elevate the radar platform and face with proper power applied.

(3) The 1/5 scale cut-away missile is a classroom training device designed to train personnel in the handling and application of the render safe procedures (RSP) of the Patriot missile.

(4) Explosive Ordnance Disposal (EOD) Missile Round Trainer (MRT). EOD personnel require a device that has the same external configuration as a tactical missile. This device is used to train EOD personnel in the recognition of the inherent hazards associated with the components of the tactical missile. It is also used to teach and perform the approved standardized render safe procedures (RSP) that are used in the event the missile is subjected to an incident/accident.

(5) Patriot Intermediate Maintenance Institutional Trainer (PIMIT). Intermediate maintenance personnel require a training device that can simulate subsystems of the RS and ECS to

enhance troubleshooting and repair techniques. The PIMIT will incorporate two dimensional devices to provide exercises and evaluations of processing and diagnostic skills that are critical for troubleshooting and repairing the Patriot missile system.

c. Institutional and Unit Training Devices. The following training devices are used to train individual tasks in the institution and in the unit they are used as sustainment trainers and crew training.

(1) Missile Round Trainer (MRT). The MRT simulates the weight, balance, and physical characteristics of the Patriot missile. It is used to train missile handling/transporting procedures and load/reload tasks. The MRT has an electrical capability to provide ECS operators a "missile ready" response that includes a missile count display during training periods. A new MRT will be fielded to units that have modified PAC-3 launchers and it will simulate the new PAC-3 missile 4-packs. It will simulate the weight, balance, and physical characteristics of the new missile.

(2) Empty Round Trainer (ERT). The ERT simulates the weight, balance, and physical characteristics of the Patriot expended rounds. It is used along with the MRT to train missile reload tasks and handling/ transporting procedures. The new ERT will be fielded to units that have modified PAC-3 launchers and it will simulate the new PAC-3 missile expended 4-pack. It will simulate the weight, balance, and physical characteristics of the expended 4-pack.

(3) Patriot Conduct of Fire Trainer (PCOFT). The PCOFT uses scenarios to provide simulations of the Patriot system displays, controls, communications, and data processing systems at the operator and supervisory personnel positions of the ECS and the ICC. The PCOFT is designed to allow each instructor training station the capability to control and monitor the simultaneous training of eight student operator positions. The training position consoles are designed to allow student operators to perform all actions related to initialization, automatic and semiautomatic operation, communications, and data processing systems. Currently nine PCOFTs are fielded at USAADASCH, Ft Bliss, TX and two PCOFTs are fielded in 94th Brigade, USAEUR, to provide sustainment and netted battalion training for Patriot personnel. The PCOFT was upgraded in FY 94 and now has the official nomenclature of AN/FSG-T2, Training Set, Guided Missile, Conduct of Fire. The majority of the former capabilities are incorporated into the upgraded system.

(4) Embedded Trainers (ETs). The embedded trainers menu has the following options for training either on the tactical system or the PCOFT. In some cases the only difference between

the two is the PCOFT sometimes uses simulated data.

(a) On-Line Training Mode (OTM) Scenario Replacement Function. This function is used to select the necessary data base used in running a TPT scenario and also is used to generate a target set data base. The On-line Training Mode (OTM) is a scenario generation function which allows the user in the field to design target sets to fly against his own data base. The OTM allows creation of three different target sets with up to 99 targets in each set. Targets may be air breathing threat (ABT), TBM, or clutter. The sets are then saved on mass storage unit (MSU) cartridges (optical disk with sweepdown IV application) and used as needed for training using TPT software. The ICC cannot run in a stand-alone mode because it must have communications with at least one FP.

(b) Live Aircraft Trainer (LAT). The LAT is a version of the tactical software, modified to track live targets and simulate their engagement. The training exercise utilizes the live aircraft trainer software at the ECS and ICC. A complete FP (RS, ECS, AMG), ICC, and the remaining FPs in the battalion can track and simulate the engagement of live targets in a simulated battalion AD mission. The ECS operator employs FP air defense standard operating procedures during this training exercise.

(c) Troop Proficiency Trainer (TPT). The Patriot TPT for operator refresher training uses a "software only" approach. The software only concept does not utilize the radar unit as an active hardware element and thus provides a completely controlled operator evaluation environment. The TPT allows Patriot operators to maintain their proficiency in tactical decision making and console operation procedures through air defense battle simulation. The TPT software allows training in a stand-alone (ECS or ICC) or netted mode (two or more ECSs, or with ICC and two or more ECSs). The TPT also allows training scenarios in a master ICC configuration. The TPT records operator switch and keyboard actions during scenario runs which can later be used for replay or hard copy evaluation.

(d) Fire Platoon Initialization Trainer. The FP Initialization Trainer (TFPI) is used to train ECS operators how to prepare the system to perform the air battle mission.

1 TFPI provides a means of training new ECS operators and maintaining the operator proficiency of unit operators in Tactical Initialization (TACI) functions. TFPI is used to train operators to input data required to maximize effectiveness of the system during an air battle.

2 Terrain Mapping provides training using

actual live radar-produced terrain data which is recorded at a specified site during a scenario generation process. Subsequent training sessions can occur at any site (no radar necessary) and use the various terrain scenarios which were previously recorded. It also provides for the definition of a reference or expert set of data which includes the actual operational search lower bound (OSLB) and mask terrain mapping (MTM) data base selected by an expert operator during the tactical initialization (TACI) mapping process. The data base is copied to a storage medium via a menu tab option. The reference data can be compared to a trainee-produced set of data. The comparisons include DTYPE 'A' which is the individual azimuth comparison of OSLB elevation and MTM elevation and range. A horizonal plot for comparison of trainee-OSLB verses reference-OSLB is provided. A toggle is provided for comparisons of DTYPE 'D' OSLB, top view, and masked areas drawing when running in single mode. Operator switch and keyboard actions are recorded for use in evaluation either by replay or hard copy.

(e) Air Defense Combined Tactical Trainer (ADCATT). The ADCATT is a system of manned air defense artillery simulators, support emulators, and semi-automated forces designed to support collective air defense training tasks in a combined arms battlefield environment. It will have simulators replicating combat vehicles, FAAD C3I nodes as well as Ground Based Radars, connected via a local area network. The system will generate a simulated battlefield which when viewed by soldiers, creates the illusion of moving and fighting over real terrain. The ADCATT is an Air Defense requirement and is currently unfunded.

7. TRAINING TEST SUPPORT STRATEGY7. TRAINING TEST SUPPORT STRATEGY. The Training Test Support Package (TTSP) is one element of the Test Support Package (TSP).

a. Initial TTSP. Initial TTSP. The initial TTSP must contain an approved STRAP, the Test Training Certification Plan, and Training Data Requirements. The STRAP must be approved prior to submitting the TTSP. The Test Training Certification Plan outlines and describes the method and procedures for evaluating and certifying individual and collective pretest training. The initial TTSP provides the test agency with the training concept for the system, the training issues upon which the trainer requires data, and the method of ensuring test players are trained. The initial submission to test agency is 18 to 20 months prior to test.

b. Final TTSP. Final TTSP. The final TTSP is prepared following instructor and key personnel training and receipt of the NET test support package from the materiel developer. This

package is submitted six months prior to training start date. The final TTSP after local approval is forwarded to USATSC, ATTN: ATIC-DMR, Fort Eustis, VA 60-90 days prior to the commencement of test player training. It consists of the following:

*(1) Training schedule.
*(2) POI for each MOS/SSI affected.
(3) ARTEP/MTP or changes to ARTEP/MTP.
*(4) List of training devices, embedded training components, and simulators.
(5) Target audience description.
(6) STPs or changes.
(7) Crew drills.
(8) Lesson plans.
*(9) Ammunition, targets and ranges required for testing.
(10) Critical task list.
*(11) Field manuals (FMs) or changes to FMs (when not provided with the Doctrine and Organizational Test Support Package).

Note: * Items are submitted to TRADOC for approval.

8. SIGNIFICANT TRAINING ISSUES AT RISK8. SIGNIFICANT TRAINING ISSUES AT RISK. The Patriot training program is in place and functioning. Major changes in the system are reflected in the training base and POIs as required. This will require continuing changes to Patriot training publications such as STPs, FMs, MTPs, and crew drills as the Patriot PAC-3 programs take place. Recommend that publication requirements be limited to actual number needed, as they become obsolete quickly.

a. Reduction of funding for the PAC-3 program improvements will result in some systems not having Configuration III applied. This means USAADASCH will have two, some Configuration II and some Configuration III systems. When the PAC-3 program is complete some Bns will and some will not be modified to Configuration III.

b. The different configurations will require the school to maintain two separate POIs for each MOS (14E and 14T). Tracking the individuals as to which training was received and where they are assigned is a concern.

c. The addition of the PAC-3 missile will require the school to teach both LS configurations because the Battalions will have both PAC-2 and PAC-3 missiles and LSs. The transition period must be monitored closely to ensure all soldiers receive either NET or school training on both launchers.

d. The different configurations will require USAOMMCS to maintain two separate POIs for MOS 27X. Subsequently, changes to the POIs will have an impact on the 27X course lengths.

9. POST-FIELDING EVALUATION SUMMARY9. POST-FIELDING EVALUATION SUMMARY.

a. Soldier Training Publications (STPs). Soldier Training Publications (STPs) will form the basis for individual training and evaluation in units. This publication contains individual task summaries which commanders and trainers can use to plan, conduct and evaluate individual training of MOS skills. The MTP will be used to train and evaluate units for necessary skills to accomplish collective tasks.

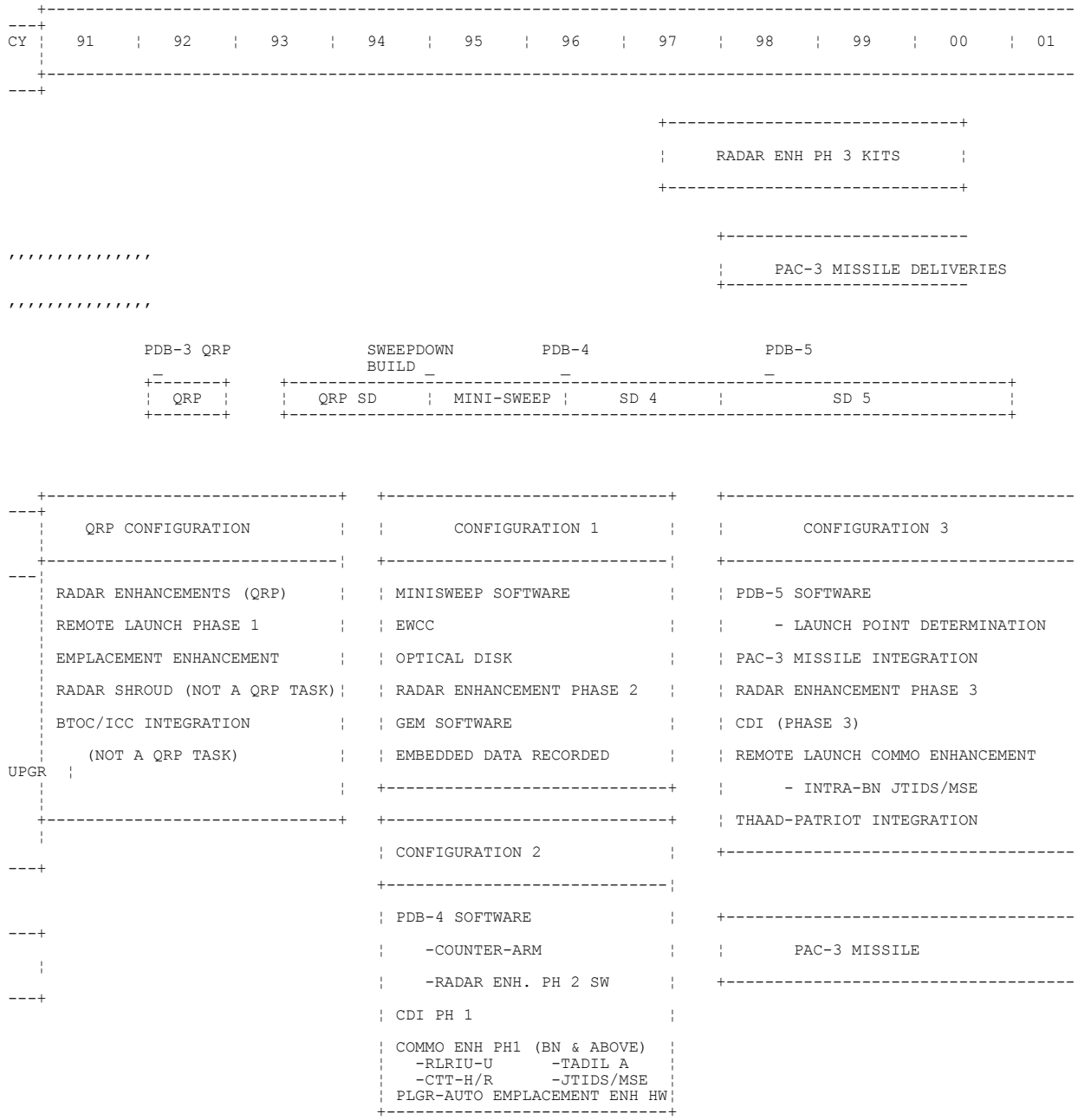
b. Director of Training Management (DTM) - Force XXI/Total Army School System (TASS) Branch. Director of Training Management (DTM) - Force XXI/Total Army School System (TASS) Branch).

(1) TASS Branch will coordinate evaluations for POIs, lesson plans, and training. Data will be collected by random sampling during course instruction and upon class graduation.

(2) Data will be collected from student demographics, student profiles, instructional feedback information, and student performance. Feedback information will also be gathered from interviews/questionnaires with test-player personnel.

(3) TASS Branch will survey field personnel and course graduates and provide feedback to the school. The results of the analysis performed by the TASS Branch will be staffed throughout the institution. The training departments with particular areas of responsibility will use this information to assist them in refining and updating the institution's training programs and devices.

(4) Training aids, simulators, and training devices will also be evaluated, and feedback data provided to the training developer.



CDI = CLASSIFICATION DETERMINATION IDENTIFICATION
EWCC= ENHANCED WEAPON CONTROL COMPUTER
GEM = GUIDANCE ENHANCED MISSILE
PDB = POST DEPLOYMENT BUILD
PLGR= PRECISION LIGHTWEIGHT GLOBAL POSITIONING SYSTEM RECEIVER
QRP = QUICK RESPONSE PROGRAM
SD = SWEEPDOWN

Figure 1. PAC-3 Milestones1. PAC-3 Milestones.

USAADASCH INSTITUTIONAL TRAINING SYSTEM

The following courses of instruction are implemented at USAADASCH:

1. COURSE: 2F-FOA-15, Air Defense Artillery (ADA) Officer Advanced Course (OAC) Patriot Follow-on.

TRAINING STRATEGY: The purpose of this course is to provide graduates of the ADA OAC, receiving assignments outside their area of concentration (AOC), with specific system skills and knowledge to function as either HAWK, Avenger, Bradley-Linebacker, or Patriot battery commanders, or in an associated staff position. Training will include the characteristics, capabilities, functions, and operations of the Patriot weapon system. Course length is 5 weeks.

LOCATION: FORT BLISS, TEXAS

LESSON PLANS: N/A

COURSE START: 891120

	FY 97	FY 98	FY 99
CLASSES/YR	6	6	6
STUDENT LOAD/YR	29	29	29

TRAS DOCUMENT:
ITP 9112
CAD 9108
POI 9202

TRAINING SUPPORT REQUIRED:

a. USAADASCH will integrate PAC-3 program improvements to the Patriot system in the 2F-FOA-15 course. The unclassified improvements include ATM, optical disk upgrade, radar enhancement II, emplacement enhancement, and JTIDS interface. (See PAC-3 program ORD (Secret NOFORN) for details of full program.) Training start date and length of training will be developed with each phase of the PAC-3 program.

b. USAADASCH will integrate PDB and sweepdown improvements to the Patriot system in the 2F-FOA-15 course. Course start dates should be six months prior to the fielding of each software/hardware (SW/HW) build.

c. USAADASCH will integrate fire direction center (FDC), master ICC (MICC), and command post automation system (CPAS) changes

in the 2F-FOA-15 course. Training start date and length of training will be developed with each program.

Figure 2. USAADASCH Institutional Training2. USAADASCH Institutional Training.

2. COURSE: 2-44-C20 (14E) ADA Officer Basic Course (OBC)

TRAINING STRATEGY: This course prepares newly commissioned officers for their first duty assignment in a Patriot unit. Training emphasizes leadership skills and the basic administrative and tactical skills officers will need to perform successfully in their assignments. OBC overall objective is to train officers to be platoon leaders, to accomplish the ADA mission, and to survive on the battlefield. Training includes a soldier environment, common core training in military writing, military history, map reading, logistics, combined arms, and NBC instruction. Branch-specific instruction will address topics pertaining to how to fight air defense artillery systems with the maneuver force at the ADA platoon level. During OBC, the student will attend the Patriot weapon qualifications track (14E). OBC is conducted in both peacetime and mobilization environments. Sustainment training will be accomplished through the use of the Army Correspondence Course Program (ACCP) (reference DA Pam 351-20, dated 1 Apr 91). Course length is 9 weeks, 4 days.

LOCATION: FORT BLISS, TEXAS

LESSON PLANS: N/A

COURSE START: 891001

	FY 97	FY 98	FY 99
CLASSES/YR	4	4	4
STUDENT LOAD/YR	140	140	140

TRAS DOCUMENT:
ITP 9112
CAD 9208
POI 9208

TRAINING SUPPORT REQUIRED:

a. USAADASCH will integrate Patriot PAC-3 program improvements to the Patriot system in the 2-44-C20 course. The unclassified improvements include ATM, optical disk upgrade, radar enhancement II, emplacement enhancement, and JTIDS interface. (See PAC-3 program ORD (Secret NOFORN) for details of full program.) Training start date and length of training will be developed with each phase of the PAC-3 program.

b. USAADASCH will integrate PDB and sweepdown improvements to the Patriot system in the 2-44-C20 course. Course start dates should be six months prior to the fielding of each SW/HW build.

c. USAADASCH will integrate FDC, MICC, and CPAS changes in the 2-44-C20 course. Training start date and length of training will be developed with each program.

Figure 2. USAADASCH Institutional Training (continued).

3. COURSE: 2F-14EX, Patriot Air Defense Officer

TRAINING STRATEGY: This course provides training for ADA and designated allied officers assigned to duty involving the Patriot missile system. The POI includes training as tactical control officer, platoon leader, and tactical director, as well as operational requirements, tactical employment, and operational procedures of the Patriot air defense system. Upon implementation of the revised ADA OBC, the 2F-14EX will be used to train FMS and reserve component (RC) officers not requiring OBC. Course length is 8 weeks, 1 day.

LOCATION: FORT BLISS, TEXAS

LESSON PLANS: N/A

COURSE START:

	FY 97	FY 98	FY 99
CLASSES/YR	1	1	1
STUDENT LOAD/YR	10	10	10

TRAS DOCUMENT:
ITP 9201
CAD 9101
POI 9211

TRAINING SUPPORT REQUIRED:

a. USAADASCH will integrate Patriot PAC-3 program improvements to the Patriot system in the 2F-14EX course. The unclassified improvements include ATM, optical disk upgrade, radar enhancement II, emplacement enhancement, and JTIDS interface. (See PAC-3 program ORD (Secret NOFORN) for details of full program.) Training start date and length of training will be developed with each phase of the PAC-3 program.

b. USAADASCH will integrate PDB and sweepdown improvements to the Patriot system in the 2F-14E course. Course start dates should be six months prior to the fielding of each SW/HW build.

c. USAADASCH will integrate FDC, MICC, and CPAS changes in the 2F-14E course. Training start date and length of training will be developed with each program.

Figure 2. USAADASCH Institutional Training (continued).

4. COURSE: 4F-140E, Patriot System Technical Warrant Officer Basic (WOTTCC)

TRAINING STRATEGY: This course will certify WO candidates or reclassified WOs in a related ADA maintenance MOS as Patriot missile system technicians. A revision of the course length is in compliance with the Warrant Officer Training System (WOTS) directive for the establishment of a separate POI for each proponent WO MOS. Training for the above course is designed to teach required skills and knowledge pertinent to the operation and unit maintenance of the Patriot system.
Course length is 28 weeks.

Reinforcement and sustainment training will be accomplished for the ADA WO through ETM (reference DA Pam 350-100 and DA Pam 351-20). Patriot missile system training is conducted in both peacetime and mobilization environments.

LOCATION: FORT BLISS, TEXAS

LESSON PLANS: N/A

COURSE START: 891114

	FY 97	FY 98	FY 99
CLASSES/YR	2	2	2
STUDENT LOAD/YR	30	30	30

TRAS DOCUMENT:
ITP 9103
CAD 8905
POI 9107

TRAINING SUPPORT REQUIRED:

a. USAADASCH will integrate Patriot PAC-3 program improvements to the Patriot system in the 4F-140E course. The unclassified improvements include ATM, optical disk upgrade, radar enhancement II, emplacement enhancement, and JTIDS interface. (See PAC-3 program ORD (Secret NOFORN) for details of full program). Training start date and length of training will be developed with each phase of the PAC-3 program.

b. USAADASCH will integrate PDB and sweepdown improvements to the Patriot system in the 4F-140E course. Course start dates should be six months prior to the fielding of each SW/HW build.

c. USAADASCH will integrate FDC, MICC, and CPAS changes in the 2F-140E course. Will include both the operator and maintainer duties assigned to the 4F-140E. Training start date and length of training will be developed with each program.

Figure 2. USAADASCH Institutional Training (continued).

5. COURSE: 632-14E10, Patriot Fire Control Operator/Maintainer

TRAINING STRATEGY FOR AIT: This course will qualify enlisted personnel as engagement controllers, Patriot system evaluator assistants, and Patriot system mechanics by providing knowledge of the operation, maintenance, and doctrine for the Patriot air defense missile system. Course length is 26 weeks.

a. Training for MOS 14E is designed and structured to provide the soldier with weapon-specific and professional skills, knowledge and principles. Weapon- specific training will include all critical tasks associated with the operation, maintenance and employment of the Patriot missile system.

b. Professional development training will provide the 14E NCO with the leadership skills necessary to train, supervise and lead subordinate personnel. Paramount in all USAADASCH instructional efforts is to train an ADA soldier to complete the assigned mission and survive in a battlefield environment.

LOCATION: FORT BLISS, TEXAS

LESSON PLANS: N/A

COURSE START: 891027

	FY 97	FY 98	FY 99
CLASSES/YR	20	20	20
STUDENT LOAD/YR	320	320	320

TRAS DOCUMENT:
ITP 9212
CAD 9007
POI 9201

TRAINING SUPPORT REQUIRED:

a. USAADASCH will integrate PAC-3 program improvements to the Patriot system in the 14E10 course. The unclassified improvements include ATM, optical disk upgrade, radar enhancement II, emplacement enhancement, and JTIDS interface. (See PAC-3 program ORD (Secret NOFORN) for details of full program.) Training start date and length of training will be developed with each phase of the PAC-3 program.

b. USAADASCH will integrate PDB and sweepdown improvements into the 14E10 course. Course start dates should be six months prior to the fielding of each SW/HW build.

c. USAADASCH will integrate FDC, MICC, and CPAS changes in the 14E10 course. Training start date and length of training will be developed with each program.

Figure 2. USAADASCH Institutional Training (continued).

6. COURSE: 632-24T10X MODIFIED, Patriot Operator and System Mechanic (German)

TRAINING STRATEGY: The purpose of this course is to train personnel in the skills, knowledge, and techniques necessary to perform unit maintenance, troubleshoot, and repair major end items within the Patriot air defense missile system (ECS, ICC, LS, and RS). Course length is 18 weeks, 4 days.

LOCATION: FORT BLISS, TEXAS

LESSON PLANS: N/A

COURSE START: 891004

	FY 97	FY 98	FY 99
CLASSES/YR	5	5	5
STUDENT LOAD/YR	72	72	72

TRAS DOCUMENT:
ITP 9212
CAD 8607
POI 9203

TRAINING SUPPORT REQUIRED:

a. USAADASCH will integrate PAC-3 program improvements to the Patriot system in the 24T10X course. The unclassified improvements include ATM, optical disk upgrade, radar enhancement II, emplacement enhancement, and JTIDS interface. (See PAC-3 program ORD (Secret NOFORN) for details of full program.) Training start date and length of training will be developed with each phase of the PAC-3 program.

b. USAADASCH will integrate PDB and sweepdown improvements to the Patriot system in the 24T10X course. Course start dates should be six months prior to the fielding of each SW/HW build.

c. USAADASCH will integrate FDC, MICC, and CPAS changes in the 24T10X course if Germany decides to use these options. These changes will include both the operator and maintainer duties assigned to the 24T10X. Training start date and length of training will be developed with each program.

Figure 2. USAADASCH Institutional Training (continued).

7. COURSE: 632-14EX, Patriot Operator ICC (Israel)

TRAINING STRATEGY: The purpose of this course is to train personnel in the skills, knowledge, and techniques necessary to perform unit maintenance, troubleshoot, and repair major end items within the Patriot air defense missile system (ECS, ICC, LS, and RS). Course length is 2 weeks.

LOCATION: FORT BLISS, TEXAS

LESSON PLANS: N/A

COURSE START:

	FY 97	FY 98	FY 99
CLASSES/YR	1	1	1
STUDENT LOAD/YR	10	10	10

TRAS DOCUMENT:
ITP 9212
CAD 9112
POI 9204

TRAINING SUPPORT REQUIRED:

a. USAADASCH will integrate PAC-3 program improvements to the Patriot system in the 14EX course. The unclassified improvements include ATM, optical disk upgrade, radar enhancement II, emplacement enhancement, and JTIDS interface. (See PAC-3 program ORD (Secret NOFORN) for details of full program.) Training start date and length of training will be developed with each phase of the PAC-3 program.

b. USAADASCH will integrate PDB and sweepdown improvements to the Patriot system in the 14EX course. Course start dates should be six months prior to the fielding of each SW/HW build.

c. USAADASCH will integrate FDC, MICC, and CPAS changes in the 14EX course if Israel decides to use these options. These changes will include both the operator and maintainer duties assigned to the 14EX. Training start date and length of training will be developed with each program.

Figure 2. USAADASCH Institutional Training (continued).

8. COURSE: 043-14T10, Patriot Launching Station Operator/Maintainer

TRAINING STRATEGY FOR AIT: The course will provide initial entry training (IET) soldiers in the MOS, skills required to perform duties of a Patriot missile crew member. It will provide training in driving skills required for the heavy expanded mobility tactical truck (HEMTT) vehicle operations, crane operation, hand signals, march order, and emplacement of Patriot missile system, related equipment operations, orientation and alignment procedures and preventive maintenance. Course length is 11 weeks.

Training for MOS 14T is designed and structured to provide the soldier with weapon-specific and professional skills, knowledge, and principles. Weapon- specific training will include all critical tasks associated with the operation, operator unit maintenance, and employment of the Patriot missile system.

LOCATION: FORT BLISS, TEXAS

LESSON PLANS: N/A

COURSE START:

	FY 97	FY 98	FY 99
CLASSES/YR	35	32	32
STUDENT LOAD/YR	560	513	513

TRAS DOCUMENT:
ITP 9212
CAD 8907
POI 9109

TRAINING SUPPORT REQUIRED:

a. USAADASCH will integrate PAC-3 program improvements to the Patriot system in the 14T10 course. The unclassified improvements include ATM, optical disk upgrade, radar enhancement II, emplacement enhancement, and JTIDS interface. (See PAC-3 program ORD (Secret NOFORN) for details of full program.) Training start date and length of training will be developed with each phase of the PAC-3 program.

b. USAADASCH will integrate PDB and sweepdown improvements in the 14T10 course. Course start dates should be six months prior to the fielding of each SW/HW build.

c. USAADASCH will integrate FDC, MICC, and CPAS changes in

the 14T10 course. These changes will include both operator and unit maintainer duties assigned to the 14-10. Training start date and length of training will be developed with each program.

Figure 2. USAADASCH Institutional Training (continued).

USAOMMCS INSTITUTIONAL TRAINING

The following courses of instruction are implemented at USAOMMCS:

1. COURSE: 4F-916A, Patriot System Intermediate Maintenance (IM) Technician (Phase I)

TRAINING STRATEGY: The course provides warrant officer personnel intermediate maintenance (IM) shop operations and necessary electronic and digital training. Course length is 13 weeks, 4 days.

LOCATION: Redstone Arsenal, Alabama

LESSON PLANS: N/A

COURSE START: N/A

	FY 97	FY 98	FY 99
CLASSES/YR	2	2	2
STUDENT LOAD/YR	11	11	11

TRAS DOCUMENT:
ITP N/A
CAD N/A
POI 8707

TRAINING SUPPORT REQUIRED:

Figure 3. USAOMMCS Institutional Training3. USAOMMCS Institutional Training.

2. COURSE: 4F-916A, Patriot System Intermediate Maintenance Technician (Phase II)

TRAINING STRATEGY: The course provides the warrant officer with the necessary technical ability to direct the repair of the Patriot missile system. Course length is 37 weeks, 4 days.

LOCATION: FORT BLISS, TEXAS

LESSON PLANS: N/A

COURSE START: 900212

	FY 97	FY 98	FY 99
CLASSES/YR			
STUDENT LOAD/YR			

TRAS DOCUMENT:
ITP N/A
CAD N/A
POI 8707

NOTE:
NO INFORMATION OR INPUT AT THIS TIME.

TRAINING SUPPORT REQUIRED:

Figure 3. USAOMMCS Institutional Training (continued).

3. COURSE: 121-27X 2/3/4, Patriot System Repairer (Phase I)

TRAINING STRATEGY: The course provides enlisted personnel the necessary electronic and digital training. Course is 9 weeks, 4 days.

LOCATION: Redstone Arsenal, Alabama

LESSON PLANS: N/A

COURSE START: N/A

	FY 97	FY 98	FY 99
CLASSES/YR	9	9	9
STUDENT LOAD/YR	54	54	54

TRAS DOCUMENT:
ITP N/A
CAD N/A
POI 8707

TRAINING SUPPORT REQUIRED:

Figure 3. USAOMMCS Institutional Training - (continued).

4. COURSE: 121-27X 2/3/4, Patriot System Repairer (Phase II)

TRAINING STRATEGY: The course provides enlisted personnel the necessary advanced training to troubleshoot and repair the electrical, electro-mechanical, and mechanical subsystems of all Patriot missile system major end items. Course length is 39 weeks, 4 days.

LOCATION: FORT BLISS, TEXAS

LESSON PLANS: N/A

COURSE START: 891001

	FY 97	FY 98	FY 99
CLASSES/YR	9	9	9
STUDENT LOAD/YR	54	54	54

TRAS DOCUMENT:
ITP N/A
CAD N/A
POI 8707

TRAINING SUPPORT REQUIRED:

Figure 3. USAOMMCS Institutional Training (continued).

EQUIPMENT REQUIREMENTS: Patriot-Peculiar, tactical (no training devices)

BOIP USAES	LIN OMMCS	NOMENCLATURE	QUANTITIES USAADASCH
77-0205-F -	L46979 6-9	Launching Station GM Semitrailer Mounted: XM90l	19
77-0206-F -	E08497 6-9	Engagement Control Station, GM Truck Mounted: AN/MSQ-104	13
77-0208-F -	R18815 6-9	Radar Set, Semitrailer Mounted; AN/MPQ-53	13
77-0209-F -	J99167 6-9	Interrogator Set, AN/TPX-46(V)7	11
77-0210-F -	T70335 -	Test Facility Set AN/TPM-24 (V)4	10
77-1212-F -	Z77520 -	Tank Fuel Unit: Nuclear Hardened 600-Gal Mtd on M353 Trailer (for EPP II)	4
77-0213-F -	J82250 3-5	Information & Coordination Central, GM System, Trk Mtd: AN/MSQ-l16	4
77-0214-F -	C60363 2-3	Communication Relay Group: AN/MRC-137	l
85-0588-F -	G35061 -	Generator Set (PU-789/M), Trailer Mounted, 30-kw, 400 Hz, 2 each	2
77-0220-F -	Z92676 -	Transporter, Guided Msl, XM 974, Semitrailer	8
77-0226-F -	Z34870 12	Air Cond; 18K BTU Cool,	37

		3K BTU Heat, 208V, 3 PH, 400 Hz, Split Pack	
79-0075-F -	A80593 1	Antenna Mast Group, UHF, Trk Mtd, OE-349/MRC	3
80-031-F 8	Z41336 -	Maintenance Set, Air Cond: 18k BTU, 400 Hz, Split Pack	-

AMMUNITION: (missile expenditures) Every second year a Bn (-) size unit from each battalion will perform the firing phase of the ARTEP. The missiles will be funded under the lot certification program.

Figure 4. Resource Summary.4. Resource Summary.

SYSTEM MILESTONE SCHEDULE-SHEET A (TRADOC REG 351-9)		PAGE 1 OF 1 PAGES		REQUIREMENTS CONTROL SYMBOL **ATTG-55**
SYSTEM Patriot		DA CATEGORY MAJOR	OFFICE SYMBOL ATSA-DT-P	AS OF DATE MAR 96
POINTS OF CONTACT		**NAME**	**OFFICE SYMBOL**	**TELEPHONE**
MATERIEL COMMAND		USAMICOM/COL KUFFNER	SFAE-MD-PA	DSN 645-3240
TRADOC PROPONENT: USAADASCH				
TSM:		COL SMITH	ATSA-TMD	DSN 978-7410
CD:		MAJ YANCEY	ATSA-CDM-T	DSN 978-1996
TD:		MR SPLAWN	ATSA-DT-P	DSN 978-2482
ASSOC SCHOOLS: USAOMMCS				
CD:		MR SAXON	ATCL-C	DSN 687-0268
TD:		CW3 Taggart	ATSK-TX	DSN 788-6883
ITEM	**DATE**	**RESPONSIBLE AGENCY/POC**		**TELEPHONE**
MNS:	18 SEP 72	USAADASCH, DCD/WEAPONS, MAJ SMITH		DSN 978-5909
ORD:	12 SEP 72	USAADASCH, DCD MLSD, MAJ SMITH		DSN 978-5909
PAC-3 ORD:	1 MAY 92, VERS 1.2, 8 DEC 93	USAADASCH, DCD/WEAPONS, CW3 TANNER		DSN 978-2104
PAC-3 ILSMP:		USAADASCH, DCD, CW2 O'KEEFE		DSN 978-5215
PAC-3 SMMP:	UPDATE 3, MAR 94	USAADASCH, DCD, CW2 D. O'KEEFE		DSN 978-5215
PAC-3 TTSP:	JAN 95	USAADASCH, DCD, MR. KELLY		DSN 978-3841
PAC-3 BOIP:	1984	USAFISA-RDD, MR. BENNETT/CPT MILLER		DSN 552-8582/8545
PAC-3 QQPRI:		MICOM, PPO, MR HEDGRICH		DSN 539-0729
PAC-3 NETP:	NOV 93	MICOM, MS SHEILA WILSON		DSN 746-3693
PAC-3 STRAP:	28 MAY 93	USAADASCH, DTM, MR SPLAWN		DSN 978-2482
PAC-3 TEMP	JAN 96	MICOM, MR. GRUNDT		DSN 788-4082
COMMENTS (If more space needed, use reverse side:):				

TRADOC FORM **569-R-E,** Aug 89

Figure 5. System Milestone Schedule

Figure 5. System Milestone Schedule.

SYSTEM MILESTONE SCHEDULE - SHEET B (TRADOC REG 351-9)	PAGE 1 OF 17 PAGES	REQUIREMENTS CONTROL SYMBOL **ATTG-55**

SYSTEM:	TRADOC SCHOOL:	AS OF DATE:
Patriot	USAADASCH	JAN 96

COMPLETED BY:	OFFICE SYMBOL:	TELEPHONE:
S. Hiatt	ATSA-TAC-OD	DSN 978-1349

TRAINING PACKAGE
ELEMENT/PRODUCT: Individual Training

LEGEND:	MILESTONE BY QUARTER																			
	FY 96				FY 97				FY 98				FY 99				FY 00			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Initial ITP completed and submitted.																				
Analysis completed.																				
Annotated Task List completed and submitted.																				
CAD.																				
Training Program Worksheet (TPW) completed and submitted.																				
ITP completed and submitted.				X																
POI completed and submitted.																				
Resident course start date.																				

NOTES: Use one sheet for each Training Element or Product and use as many sheets as required for a complete list. See TRADOC Reg 351-9.

COMMENTS: (continue on reverse side if necessary)
1. 140E
2. 14EX
3. 14E

TRADOC FORM **569-1-R-E**, Aug 89

Figure 5. System Milestone Schedule (Continued).

SYSTEM MILESTONE SCHEDULE - SHEET B (TRADOC REG 351-9)	PAGE 2 OF 17 PAGES	REQUIREMENTS CONTROL SYMBOL **ATTG-55**

SYSTEM:	TRADOC SCHOOL:	AS OF DATE:
Patriot	USAADASCH	FEB 96

COMPLETED BY:	OFFICE SYMBOL:	TELEPHONE:
Russell Denham	ATSA-TAC-D	DSN 978-0766

TRAINING PACKAGE
ELEMENT/PRODUCT: Armywide Training Literature Program (ATLP)

LEGEND:	MILESTONE BY QUARTER																			
	FY 96				FY 97				FY 98				FY 99				FY 00			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Requirements identified.		2																		
Draft ATLP changes validated.																				
Field Manual (FM) outlines approved.																				
Coordinating draft completed.		5/4																		
Comprehensive dummy completed.		5/4		2																
Print request initiated.		3	5/4	2																
Approved CR and comprehensive dummy submitted.		3	5/4																	
Printing and distribution completed.			3	5/4																

NOTES: Use one sheet for each Training Element or Product and use as many sheets as required for a complete list. See TRADOC Reg 351-9.

COMMENTS: (continue on reverse side if necessary)
1. FM 44-100 US Army Air Defense Operations. (DA print 15 Jun 95)
2. FM 44-100A (S) US Army Air Defense Operations Planning.
3. FM 44-85 Patriot Battalion/Battery Operations. (Superseded FM 44-15 and FM 44-15-1.
4. FM 44-85-1 Patriot TTP.
5. FM 44-100-2 Air Defense Artillery Reference Handbook.

TRADOC FORM **569-1-R-E**, Aug 89

Figure 5. System Milestone Schedule (Continued).

SYSTEM MILESTONE SCHEDULE - SHEET B (TRADOC REG 351-9)	PAGE 3 OF 17 PAGES	REQUIREMENTS CONTROL SYMBOL **ATTG-55**
SYSTEM: Patriot	TRADOC SCHOOL: USAADASCH	AS OF DATE: FEB 96
COMPLETED BY: D. Mussey	OFFICE SYMBOL: ATSA-TAC-N	TELEPHONE: DSN 978-6049

TRAINING PACKAGE ELEMENT/PRODUCT: Soldier's Training Publications (SM, TG, MQS)

LEGEND:	MILESTONE BY QUARTER																			
	FY 96				FY 97				FY 98				FY 99				FY 00			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Front End Analysis (FEA) completed.																				
Draft SM/TG/MQS submitted.		X																		
USATSC staffing.			X																	
CR submitted.					X															
Distribution.						X														

NOTES: Use one sheet for each Training Element or Product and use as many sheets as required for a complete list. See TRADOC Reg 351-9.

COMMENTS: (continue on reverse side if necessary)
1. STP 44-14E1-SM, Patriot Fire Control Operator
2. STP 44-14E25-SM-TG, Patriot Fire Control Operator
3. STP 44-14T1-SM, Patriot Launching Station Operator
4. STP 44-14T24-SM-TG, Patriot Launching Station Operator

TRADOC FORM **569-1-R-E**, Aug 89

Figure 5. System Milestone Schedule (Continued).

SYSTEM MILESTONE SCHEDULE - SHEET B (TRADOC REG 351-9)	PAGE 4 OF 17 PAGES	REQUIREMENTS CONTROL SYMBOL **ATTG-55**

SYSTEM:	TRADOC SCHOOL:	AS OF DATE:
Patriot	USAADASCH	Feb 96

COMPLETED BY:	OFFICE SYMBOL:	TELEPHONE:
Russell Denham	ATSA-TAC-D	DSN 978-0766

TRAINING PACKAGE ELEMENT/PRODUCT: Army Training and Evaluation Program (ARTEP)

LEGEND:	MILESTONE BY QUARTER																			
	FY 96				FY 97				FY 98				FY 99				FY 00			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Conduct or review of collective FEA completed.																				
Draft CT concept prepared.																				
CT package for combat critical collective tasks for testing prepared.																				
Test edition ARTEP/CT support package distributed.	X																			
Test edition ARTEP/CT evaluated.			X																	
Coordinating draft ARTEP staffed.					X															
ARTEP distributed.							X													

NOTES: Use one sheet for each Training Element or Product and use as many sheets as required for a complete list. See TRADOC Reg 351-9.

COMMENTS: (continue on reverse side if necessary)
1. ARTEP 44-635-MTP ADA Bn, Patriot
2. ARTEP 44-637-30-MTP ADA Btry, Patriot
3. ARTEP 44-635-11-Drill (EPP, AMG)
4. ARTEP 44-635-12-Drill (ICC/EPU II, CRG)
5. ARTEP 44-635-13-Drill (ECS, RS)
6. ARTEP 44-635-14-Drill (LS, MSL Reload)

Note: Drills are updated to include Configuration II HW and PDB-4 SW.

TRADOC FORM **569-1-R-E**, Aug 89

Figure 5. System Milestone Schedule (Continued).

SYSTEM MILESTONE SCHEDULE - SHEET B (TRADOC REG 351-9)	PAGE 5 OF 17 PAGES	REQUIREMENTS CONTROL SYMBOL **ATTG-55**
SYSTEM: Patriot	TRADOC SCHOOL: USAADASCH	AS OF DATE: JAN 96
COMPLETED BY: Mr Rojas	OFFICE SYMBOL: ATSA-TPF	TELEPHONE: DSN 978-3535

TRAINING PACKAGE
ELEMENT/PRODUCT: Individual Training

LEGEND:	MILESTONE BY QUARTER																			
	FY 96				FY 97				FY 98				FY 99				FY 00			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Initial ITP completed and submitted.																				
Analysis completed.																				
Annotated Task List completed and submitted.																				
CAD.				X																
Training Program Worksheet (TPW) completed and submitted.																				
ITP completed and submitted.				X																
POI completed and submitted.										X										
Resident course start date.													X							

NOTES: Use one sheet for each Training Element or Product and use as many sheets as required for a complete list. See TRADOC Reg 351-9.

COMMENTS: (continue on reverse side if necessary)
1. 16T10
2. 24T10
3. 24T10X (ISRAELI)
4. 24T10X MODIFIED (GERMAN)
5. 14T10
6. 14E10

TRADOC FORM **569-1-R-E**, Aug 89

Figure 5. System Milestone Schedule (Continued).

SYSTEM MILESTONE SCHEDULE - SHEET B (TRADOC REG 351-9)	PAGE 6 OF 17 PAGES	REQUIREMENTS CONTROL SYMBOL **ATTG-55**

SYSTEM: Patriot	TRADOC SCHOOL: USAADASCH	AS OF DATE: FEB 96

COMPLETED BY:	OFFICE SYMBOL:	TELEPHONE: DSN 978-

TRAINING PACKAGE
ELEMENT/PRODUCT: Training Devices

LEGEND:	MILESTONE BY QUARTER																			
	FY 96				FY 97				FY 98				FY 99				FY 00			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
FEA reviewed. High risk, hard to train tasks identified.																				
Device concept validated.																				
Need identified in ORD or training device MNS.																				
Requirements & training device strategy incorporated into STRAP.																				
Analytical justification via CTEA as input to COEA completed.																				
Training Device Operational Requirement Document.																				
Device effectiveness validated. (Delivered)																				
MOS specific milestones/requirements for devices developed and incorporated in ITS.																				

NOTES: Use one sheet for each Training Element or Product and use as many sheets as required for a complete list. See TRADOC Reg 351-9.

COMMENTS: (continue on reverse side if necessary)
Note: All existing Patriot training devices are updated as the system configuration and PDBs are updated.

TRADOC FORM **569-1-R-E**, Aug 89

Figure 5. System Milestone Schedule (Continued).

SYSTEM MILESTONE SCHEDULE - SHEET B (TRADOC REG 351-9)	PAGE 7 OF 17 PAGES	REQUIREMENTS CONTROL SYMBOL **ATTG-55**

SYSTEM:	TRADOC SCHOOL:	AS OF DATE:
Patriot	USAADASCH	FEB 96

COMPLETED BY:	OFFICE SYMBOL:	TELEPHONE:
R. Schaefer	ATSA-DT-P	DSN 978-5545

TRAINING PACKAGE ELEMENT/PRODUCT: Facilities

LEGEND:	MILESTONE BY QUARTER																			
	FY 96				FY 97				FY 98				FY 99				FY 00			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
FEA revised. Range and facility requirements identified.																				
Construction requirements submitted to MACOM.																				
Directorate of Public Works and Logistics (DPWL) development or construction requirements coordinated.																				
Requirements validated and updated.																				
Supportive developments/requirements identified and availability or development coordinated.																				
Installation requirements submitted to MACOM with other construction requirements.																				
Refined construction requirements. Range criteria forwarded to MACOM.																				
Construction.																				

NOTES: Use one sheet for each Training Element or Product and use as many sheets as required for a complete list. See TRADOC Reg 351-9.

COMMENTS: (continue on reverse side if necessary)

All required construction projects are complete.

TRADOC FORM **569-1-R-E**, Aug 89

Figure 5. System Milestone Schedule (Continued).

SYSTEM MILESTONE SCHEDULE - SHEET B (TRADOC REG 351-9)	PAGE 8 OF 17 PAGES	REQUIREMENTS CONTROL SYMBOL **ATTG-55**
SYSTEM: Patriot	TRADOC SCHOOL: USAADASCH	AS OF DATE: Feb 96
COMPLETED BY: R. Schaefer	OFFICE SYMBOL: ATSA-DT-P	TELEPHONE: DSN 978-5545
TRAINING PACKAGE ELEMENT/PRODUCT: Training Ammunition		

LEGEND:	MILESTONE BY QUARTER																			
	FY 96				FY 97				FY 98				FY 99				FY 00			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
FEA reviewed. Ammunition identified.																				
Tentative validation of ammunition requirements.																				
Requirements included in ORD/TDORD.																				
Ammunition item developed.																				
Validate/Test.																				
Ammunition requirements in ITP.																				
Requirements provided to appropriate installation/MACOM manager.																				
Production.																				

NOTES: Use one sheet for each Training Element or Product and use as many sheets as required for a complete list. See TRADOC Reg 351-9.

COMMENTS: (continue on reverse side if necessary)

NOTE: Ammo identified in Resource Summary. No new ammo requirements. Present requirements fulfill training requirements.

TRADOC FORM **569-1-R-E**, Aug 89

Figure 5. System Milestone Schedule (Continued).

SYSTEM MILESTONE SCHEDULE - SHEET B (TRADOC REG 351-9)	PAGE 9 OF 17 PAGES	REQUIREMENTS CONTROL SYMBOL **ATTG-55**

SYSTEM:	TRADOC SCHOOL:	AS OF DATE:
Patriot	USAADASCH	Feb 96

COMPLETED BY:	OFFICE SYMBOL:	TELEPHONE:
R. Schaefer	ATSA-DT-P	DSN 978-5545

TRAINING PACKAGE ELEMENT/PRODUCT: New Equipment Training (NET)

LEGEND:	MILESTONE BY QUARTER																			
	FY 96				FY 97				FY 98				FY 99				FY 00			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Staff planner course developed by AMC.																				
Technical training courses for testing.																				
Technical training courses for instructors and key Personnel.																				
DTT identified.																				
NET.																				

NOTES: Use one sheet for each Training Element or Product and use as many sheets as required for a complete list. See TRADOC Reg 351-9.

COMMENTS: (continue on reverse side if necessary)

PAC-3 Configuration I

TRADOC FORM **569-1-R-E**, Aug 89

Figure 5. System Milestone Schedule (Continued).

SYSTEM MILESTONE SCHEDULE - SHEET B (TRADOC REG 351-9)	PAGE 10 OF 17 PAGES	REQUIREMENTS CONTROL SYMBOL **ATTG-55**
SYSTEM: Patriot	TRADOC SCHOOL: USAADASCH	AS OF DATE: Feb 96
COMPLETED BY: R. Schaefer	OFFICE SYMBOL: ATSA-DT-P	TELEPHONE: DSN 978-5545

TRAINING PACKAGE ELEMENT/PRODUCT: New Equipment Training (NET)

LEGEND:	MILESTONE BY QUARTER																			
	FY 96				FY 97				FY 98				FY 99				FY 00			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Staff planner course developed by AMC.																				
Technical training courses for testing.																				
Technical training courses for instructors and key personnel.		X																		
DTT identified.	X																			
NET			X	X	X	X	X	X	X											

NOTES: Use one sheet for each Training Element or Product and use as many sheets as required for a complete list. See TRADOC Reg 351-9.

COMMENTS: (continue on reverse side if necessary)

PAC-3 Configuration II and PDB-4

TRADOC FORM **569-1-R-E**, Aug 89

Figure 5. System Milestone Schedule (Continued).

SYSTEM MILESTONE SCHEDULE - SHEET B (TRADOC REG 351-9)	PAGE 11 OF 17 PAGES	REQUIREMENTS CONTROL SYMBOL **ATTG-55**

SYSTEM:	TRADOC SCHOOL:	AS OF DATE:
Patriot	USAADASCH	Feb 96

COMPLETED BY:	OFFICE SYMBOL:	TELEPHONE:
R. Schaefer	ATSA-DT-P	DSN 978-5545

TRAINING PACKAGE ELEMENT/PRODUCT: New Equipment Training (NET)

LEGEND:	MILESTONE BY QUARTER																			
	FY 96				FY 97				FY 98				FY 99				FY 00			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Staff planner course developed by AMC.																				
Technical training courses for testing.																				
Technical training courses for instructors and key personnel.								X												
DTT identified.							X													
NET.												X	X	X	X	X	X			

NOTES: Use one sheet for each Training Element or Product and use as many sheets as required for a complete list. See TRADOC Reg 351-9.

COMMENTS: (continue on reverse side if necessary)

Configuration III and PDB-5

TRADOC FORM **569-1-R-E**, Aug 89

Figure 5. System Milestone Schedule (Continued).

SYSTEM MILESTONE SCHEDULE - SHEET B (TRADOC REG 351-9)	PAGE 12 OF 17 PAGES	REQUIREMENTS CONTROL SYMBOL **ATTG-55**
SYSTEM: Patriot	TRADOC SCHOOL: USAADASCH	AS OF DATE: Feb 96
COMPLETED BY:	OFFICE SYMBOL:	TELEPHONE: DSN 978-

TRAINING PACKAGE
ELEMENT/PRODUCT: Cost and Training Effectiveness Analysis (CTEA)

LEGEND:	MILESTONE BY QUARTER																			
	FY 96				FY 97				FY 98				FY 99				FY 00			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
CTEA developed.																				
CTEA incorporated into COEA.																				
CTEA data to contractors and MOS analysis for FEA.																				
CTEA updated using results of operational testing.																				
CTEA finalized.																				

NOTES: Use one sheet for each Training Element or Product and use as many sheets as required for a complete list. See TRADOC Reg 351-9.

COMMENTS: (continue on reverse side if necessary)

1. CTEA - 1980
2. Allen Study TEA - 1986
3. PFTEA - 1987

TRADOC FORM **569-1-R-E**, Aug 89

Figure 5. System Milestone Schedule (Continued).

SYSTEM MILESTONE SCHEDULE - SHEET B (TRADOC REG 351-9)	PAGE 13 OF 17 PAGES	REQUIREMENTS CONTROL SYMBOL **ATTG-55**

SYSTEM:	TRADOC SCHOOL:	AS OF DATE:
Patriot	USAADASCH	FEB 96

COMPLETED BY:	OFFICE SYMBOL:	TELEPHONE:
L. Fogg	ATSA-DT-T	DSN 978-6634

TRAINING PACKAGE ELEMENT/PRODUCT: DA Visual Information Production and Distribution Program (DAVIPDP)

LEGEND:	MILESTONE BY QUARTER																			
	FY 96				FY 97				FY 98				FY 99				FY 00			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
FEA reviewed. High risk tasks and jobs identified.																				
Requirements tentatively validated in storyboard format.																				
DAVIPDP requirements submitted to USATSC.																				
Requirements approval by DA.																				
Production initiated.																				
Production completed and submitted to USATSC.																				
Distribution completed.																				

NOTES: Use one sheet for each Training Element or Product and use as many sheets as required for a complete list. See TRADOC Reg 351-9.

COMMENTS: (continue on reverse side if necessary)
1. TF/VT 44-6332 701578DA Patriot: The Edge in Air Defense
2. TF/VT 44-6333 701579DA Patriot Phased Array Radar

TRADOC FORM **569-1-R-E**, Aug 89

Figure 5. System Milestone Schedule (Continued).

SYSTEM MILESTONE SCHEDULE - SHEET B (TRADOC REG 351-9)	PAGE 14 OF 17 PAGES	REQUIREMENTS CONTROL SYMBOL **ATTG-55**

SYSTEM:	TRADOC SCHOOL:	AS OF DATE:
Patriot	USAADASCH	FEB 96

COMPLETED BY:	OFFICE SYMBOL:	TELEPHONE:
L. Fogg	ATSA-DT-T	DSN 978-6634

TRAINING PACKAGE
ELEMENT/PRODUCT: Army Correspondence Course Program (ACCP)

LEGEND:	MILESTONE BY QUARTER																			
	FY 96				FY 97				FY 98				FY 99				FY 00			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Requirement identified/submitted for approval.																				
Requirement approved by USATSC/TRADOC.																				
Development initiated.																				
Advance breakdown sheets submitted.																				
Camera ready (CR) submitted.																				
Subcourse material ready for distribution.																				

NOTES: Use one sheet for each Training Element or Product and use as many sheets as required for a complete list. See TRADOC Reg 351-9.

COMMENTS: (continue on reverse side if necessary)

1. AD 0415 Intro to Patriot Msl Sys
2. AD 0402 Patriot Sys Vehicles
3. AD 0448 Patriot Sys Communications
4. AD 0400 Patriot Sys Orientation and Alignment
5. AD 0417 Patriot Sys and Msl Safety
6. AD 0406 Denial and Destruction of Patriot Equipment
7. AD 0421 MO&E Procedures for the LS
8. AD 0404 Patriot Msl Reload and Crane Opers
9. AD 0407 Patriot LS PMCS and GM Canister Cor Maint
10. AD 0471 Patriot Operations and Intelligence
11. AD 0419 Emplacement and march order for the ECS/ICC
12. AD 0416 Patriot ECS Operations
13. AD 0423 Introduction to the Patriot Radar Set
14. AD 0439 Emplacement and March Order of Radar Set
15. AD 0438 Identification Friend or Foe (IFF)
16. AD 0440 Emplacement and March Order of the CRG
17. AD 0472 Emplacement and March Order of the EPU II
18. AD 0470 Corrective Maintenance of the Patriot CRG
19. AD 0441 Patriot Communications Sys Initialization
20. AD 0473 Patriot ICC Operations
21. AD 0449 Patriot Maintenance Management
22. AD 0447 Corrective Maintenance of the AMG
23. AD 0418 Corrective Maint of the ECS and ICC
24. AD 0403 Patriot LS Org Level PMCS
25. AD 0442 Corrective Maintenance of the Patriot LS-Part I
26. AD 0443 Corrective Maintenance of the Patriot LS-Part II
27. AD 0444 Corrective Maintenance of the Patriot LS-Part III
28. AD 0401 Corrective Maintenance of the Patriot RS-Part I
29. AD 0424 Corrective Maintenance of the Patriot RS-Part II
30. AD 0425 Corrective Maintenance of the Patriot RS-Part III
31. AD 0426 Corrective Maintenance of the Patriot RS-Part IV
32. AD 0437 Corrective Maintenance of the Patriot RS-Part V

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Figure 5. System Milestone Schedule (Continued).

SYSTEM MILESTONE SCHEDULE - SHEET B (TRADOC REG 351-9)	PAGE 15 OF 17 PAGES	REQUIREMENTS CONTROL SYMBOL **ATTG-55**

SYSTEM:	TRADOC SCHOOL:	AS OF DATE:
Patriot	USAADASCH	Feb 96

COMPLETED BY:	OFFICE SYMBOL:	TELEPHONE:
L. Fogg	ATSA-DT-T	DSN 978-6634

TRAINING PACKAGE ELEMENT/PRODUCT: Interactive Video Disk (IVD)

LEGEND:	MILESTONE BY QUARTER																			
	FY 96				FY 97				FY 98				FY 99				FY 00			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Identify requirements.																				
Submit prospectus.																				
Identify resources.																				
ATSC validation.																				
Develop (include mastering and validation).																				
Distribute.																				

NOTES: Use one sheet for each Training Element or Product and use as many sheets as required for a complete list. See TRADOC Reg 351-9.

COMMENTS: (continue on reverse side if necessary)

NOTE: All IVD lessons are distributed.

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Figure 5. System Milestone Schedule (Continued).

SYSTEM MILESTONE SCHEDULE - SHEET B (TRADOC REG 351-9)	PAGE 16 OF 17 PAGES	REQUIREMENTS CONTROL SYMBOL **ATTG-55**
SYSTEM: Patriot	TRADOC SCHOOL: USAADASCH	AS OF DATE: Feb 96
COMPLETED BY: C. Cartagena	OFFICE SYMBOL: ATSA-DT-T	TELEPHONE: DSN 978-4803

TRAINING PACKAGE ELEMENT/PRODUCT: Institutional Scenarios

LEGEND:	MILESTONE BY QUARTER																			
	FY 96				FY 97				FY 98				FY 99				FY 00			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Requested new scenario.			4																	
Requested scenario change.	6	6	8	6																
Software change requires scenario revision.		16	16	16																
Hardware change requires scenario revision.																				
Change to trainer requires scenario revision.																				

NOTES: Use one sheet for each Training Element or Product and use as many sheets as required for a complete list. See TRADOC Reg 351-9.

COMMENTS: (continue on reverse side if necessary)

1. 2205A551 Perform FP Init
2. 22050451 Perform FP Init
3. 22050551 Perform FP Init
4. 22050751 Perform FP Init
5. 22110761 Perform Bn Init
6. 22110861 Perform Bn Init
7. 22110961 Perform Bn Init
8. 23021A11 Intro to ADB (ECS)
9. 23021B21 Intro to ADB (ICC)
10. 23022B21 Intro to ADB (ICC)
11. 23041A11 TCO Response (ECS)
12. 23041B11 TCO Response (ECS)
13. 23042B11 TCO Response (ECS)
14. 23042A11 TCO Response (ECS)
15. 23042B11 TCO Response (ECS)
16. 23043A11 TCO Response (ECS)
17. 23044B11 TCO Response (ECS)
18. 23061A11 TCA Response (ECS)
19. 23061B11 TCA Response (ECS)
20. 23062A11 TCA Response (ECS)
21. 23062B11 TCA Response (ECS)
22. 23063A11 TCA Response (ECS)
23. 23063B11 TCA Response (ECS)
24. 23064A11 TCA Response (ECS)
25. 23064B11 TCA Response (ECS)
26. 23100139 TCO Response (ECS)
27. 23120111 Practice ADB (ECS)
28. 23120211 Practice ADB (ECS)
29. 23120311 Practice ADB (ECS)
30. 23120411 Practice ADB (ECS)
31. 23120511 Practice ADB ECS)
32. 23120611 Practice ADB (ECS)
33. 23120711 Practice ADB (ECS)
34. 23120811 Practice ADB (ECS)
35. 23121011 Practice ADB (ECS)
36. 23121411 Practice ADB (ECS)
37. 23121511 Practice ADB (ECS)
38. 23121711 Practice ADB (ECS)
39. 23141A21 TD Response (ICC)
40. 23141B21 TCA Response (ICC)
41 23142A21 TD Response (ICC)
42. 23142B21 TD Response (ICC)
43. 23143A21 TD Response (ICC)
44. 23143B21 TD Response (ICC)
45. 23144A21 TD Response (ICC)
46. 23145A21 TD Response (ICC
47. 23145B21 TD Response (ICC)
48. 23161A21 TDA Response (ICC)
49. TP811 FU Operations
50. TP812 FU Operations
51. TP813 FU Operations
52. TP814 Practice ADB Netted

Note: #49-52 new scenarios.

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Figure 5. System Milestone Schedule (Continued).

SYSTEM MILESTONE SCHEDULE - SHEET B (TRADOC REG 351-9)	PAGE 17 OF 17 PAGES	REQUIREMENTS CONTROL SYMBOL **ATTG-55**

SYSTEM:	TRADOC SCHOOL:	AS OF DATE:
Patriot	USAADASCH	Feb 96

COMPLETED BY:	OFFICE SYMBOL:	TELEPHONE:
C. Cartagena	ATST-DT-T	DSN 978-4803

TRAINING PACKAGE ELEMENT/PRODUCT: Institutional Scenarios

LEGEND:	MILESTONE BY QUARTER																			
	FY 96				FY 97				FY 98				FY 99				FY 00			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Requested new scenario.																				
Requested scenario change.	4	4	2	4																
Software change requires scenario revision.		15	15	15																
Hardware change requires scenario revision.																				
Change to trainer requires scenario revision.																				

NOTES: Use one sheet for each Training Element or Product and use as many sheets as required for a complete list. See TRADOC Reg 351-9.

COMMENTS: (continue on reverse side if necessary)

Note: * = Scenarios 1-40

1. 23161B21 TDA Response (ICC)
2. 23162A21 TDA Response (ICC)
3. 23162B21 TDA Response (ICC)
4. 23163A21 TDA Response (ICC)
5. 23163B21 TDA Response (ICC)
6. 23164B21 TDA Response (ICC)
7. 23180521 Practice ADB (ICC)
8. 23180621 Practice ADB (ICC)
9. 23180721 Practice ADB (ICC)
10. 23180821 Practice ADB (ICC)
11. 23200344 Practice ADB (Bn/FP Net)
12. 23200444 Practice ADB (Bn/FP Net)
13. 23200544 Practice ADB (Bn/FP Net)
14. 23200744 Practice ADB (Bn/FP Net)
15. 23200844 Practice ADB (Bn/FP Net)
16. 23200944 Practice ADB (Bn/FP Net)
17. 23201144 Practice ADB (Bn/FP Net)
18. 23201244 Practice ADB (Bn/FP Net)
19. 23201444 Practice ADB (Bn/FP Net)
20. 23201744 Practice ADB (Bn/FP Net)
21. 23202044 Practice ADB (Bn/FP Net)
22. 23202344 Practice ADB (Bn/FP Net)
23. 23211A81 Master ICC
24. 99070651 Exam - FP Init
25. 99090661 Exam - Bn Init
26. 99110611 Exam - FPOPS (ECS-sing)
27. 99130621 Exam - Bn Ops (ICC)
28. 9941A551 Exam - FP Emplacement
29. 9941B551 Exam - FP Emplacement
30. 9943A861 Exam - Bn Emplacement
31. 9943B861 Exam - Bn Emplacement
32. 9945A111 Exam - FP Ops (Dual)
33. 9945A211 Exam - FP Ops (Dual)
34. 9945B111 Exam - FP Ops (Dual)
35. 9945B211 Exam - FP Ops (Dual)
36. 9947A121 Exam (ICC)
37. 9947A221 Exam (ICC)
38. 9947B121 Exam (ICC)
39. 9947B221 Exam (ICC)
40. TP201 Perform FP Init
41. TP202 Perform FP Init
42. TP203 Perform FP Init
43. TP204 Practice ADB (ECS)
44. TP205 Practice ADB (ECS)
45. TP206 Practice ADB (ECS)
46. TP207 Perform Bn Init
47. TP208 Practice ADB (ICC)
48. TP209 Perform Bn Net Init
49. TP210 Practice ADB Netted
50.

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Figure 5. System Milestone Schedule (Continued).

UNIT/SUSTAINMENT TRAINING

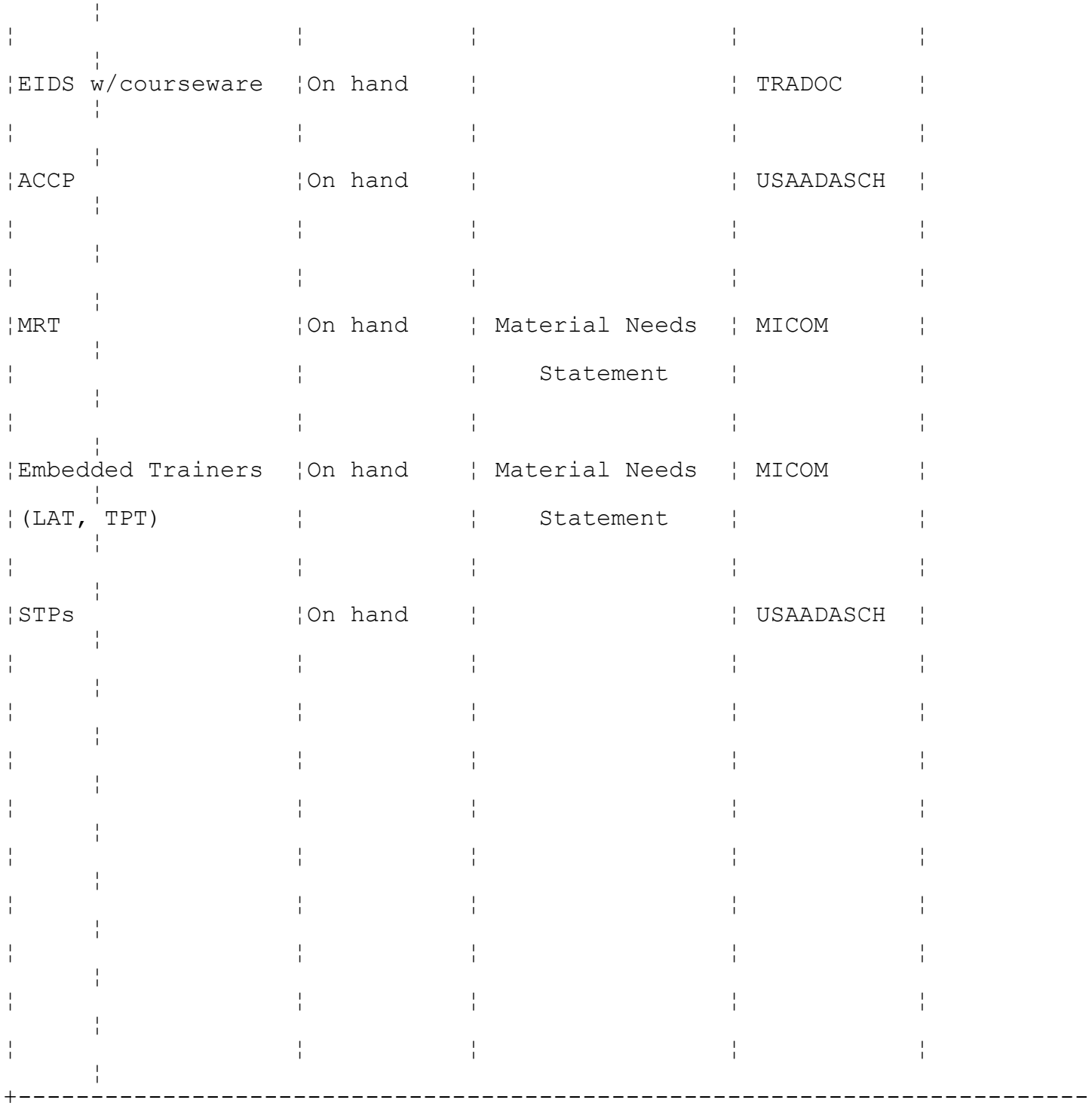
LCSMM PHASE: Production and Deployment | SYSTEM: Patriot

1. Individual Training:

a. Strategy (To sustain individual skills). Training for Patriot is designed and structured to provide the soldier expertise in both Patriot-specific and professional skills, knowledge, and principles. Patriot-specific training includes all tasks associated with operator and unit maintenance on each component of the Patriot system. Professional development will provide the Patriot NCO with the leadership skills necessary to train, supervise, and lead subordinate personnel. Individual proficiency certification authority rests with the Patriot unit. (Figure 7.)

b. Products required to sustain individual skills:

PRODUCT	DATE REQUIRED	RESOURCE DOCUMENTS	RESPONSIBLE AGENCY	REMARKS
AN/FSG-T2, Tng Set, Guided Msl Conduct of Fire	On hand	Material Needs Statement	MICOM	
Tactical Equipment	On hand	Material Needs Statement	MICOM	



EIDS w/courseware	On hand		TRADOC
ACCP	On hand		USAADASCH
MRT	On hand	Material Needs Statement	MICOM
Embedded Trainers (LAT, TPT)	On hand	Material Needs Statement	MICOM
STPs	On hand		USAADASCH

Figure 6. Unit/Sustainment Training6. Unit/Sustainment Training.

2. Collective Training:

a. Strategy: ARTEP, MTP and crew drills incorporate the collective training required by the Patriot battalion. Proficiency certification for Patriot crews is the responsibility of the Battalion or Brigade as appropriate.

Note: Fort Bliss Center Certification is no longer required.

b. Products or support required to support collective training:

PRODUCT	DATE REQUIRED	RESOURCE DOCUMENTS	RESPONSIBLE AGENCY	REMARKS
AN/FSG-T2, Tng Set, Guided Msl Conduct of Fire	On hand	Material Needs Statement	MICOM	
Tactical Equipment	On hand	Material Needs Statement	MICOM	
EIDS w/courseware	On hand		TRADOC	

MRT	On hand	Material Needs Statement	MICOM	
Embedded Trainers (LAT, TPT)	On hand	Material Needs Statement	MICOM	
Crew drills (Config II/PDB4)	4 Qtr 97		USAADASCH	
MTPs	On hand		USAADASCH	

Figure 6. Unit/Sustainment Training (continued).

EVENT FREQUENCY (1)		PHYS TNG	MOS TNG	CTT	CMT (2)	NBC TNG	LDR DEV(3)	MAINT TNG	DRVR TNG					
MOS 14T/14E														
DAILY	AC	X	6(4)											
	RC													
WEEKLY	AC			X										
	RC													
MONTHLY	AC					X	X	X						
	RC													
QUARTERLY	AC								X					
	RC													
SEMIANNUALLY	AC	T												
	RC													
ANNUALLY	AC			T	X									
	RC													
BIENNIALLY	AC													
	RC													
AS REQUIRED	AC													
	RC													

RESOURCES													
OPTEMPO													
AMMUNITION													
TADSS		(5)											
TRAINING LAND													
TRAINING RANGES													

LEGEND:

(1) Areas may be trained more often based on NCO feedback and Cdr's assessment to support METL proficiency.

(2) CMT is mandatory training IAW AR 350-1. (UCMJ, SAEDA, combat life saver, etc.)

(3) Leadership development includes NCOPD, career counseling, civilian education skills, MQS, etc.)

(4) MRT is mandatory for use prior to missile movement certification for MOS 14T.

(5) Embedded training system: LAT, TPT, OTM, TMT for MOS 14E.

Note: AC is active component; RC is reserve component; T is the testing requirement.

Figure 7. Soldier Strategy7. Soldier Strategy.

TABLE	TASK	LEVEL	HOW	WHERE	FREQUENCY
I	SYSTEM SKILLS	CREW MEMBER	HANDS ON PATRIOT SYS	IRP/LAT	TWICE WEEKLY
II	BATTLE DRILL TRAINING	CREW MEMBER	HANDS ON PATRIOT SYS	IRP/LAT	TWICE WEEKLY
III	AIR BATTLE MANAGEMENT	CREW MEMBER	INDIV INSTR PCOFT OPERATIONS	CLASSROOM PCOFT	TWICE WEEKLY MONTHLY
IV	CREW QUALIFICATION	CREW MEMBER	WRITTEN EXAM PRACTICAL EXAM	IRP/LAT	INITIAL 90 DAYS
V	AIR BATTLE MANAGEMENT	CREW	EMBEDDED TRAINER/PCOFT	IRP/LAT/ PCOFT	WEEKLY
VI	DAYTIME MARCH ORDER & EMPLACE	CREW	PRACTICAL EXERCISE	IRP/LTA	WEEKLY
VII	PRACTICE ADT 5 & 6	CREW, BATTERY	PRACTICAL EXERCISE	IRP/LTA	90 DAYS
VIII	CREW QUALIFICATION	CREW, BATTERY	PRACTICAL EXERCISE	LTA	90 DAYS
IX	AIR BATTLE MANAGEMENT	CREW	EMBEDDED TRAINER	IRP/LAT	AS REQUIRED
X	6 & NIGHTTIME & NBC	CREW, BATTERY	PRACTICAL EXERCISE	IRP/LTA	180 DAYS
XI	PRACTICE ADT 9 & 10	CREW, BATTERY	PRACTICAL EXERCISE	IRP/LTA	180 DAYS
XII	CREW QUALIFICATION	CREW, BATTERY	PRACTICAL EXERCISE	LTA	360 DAYS

Figure 8. Gunnery Matrix.8. Gunnery Matrix.

Table definitions and standards:

Table I - System Skills. Table I trains crew members on basic operation of the Patriot system. The goal is for crews to prepare the system to launch a missile. Table I consists of march order and emplacement drills, PMCS, fault recognition, missile reload, and UHF communications skills.

Standards: Crew members perform all actions required to prepare the Patriot battery to participate in an integrated air battle.

Table II - Crew Drill Training. Table II trains crew members to configure the Patriot system for missile launch and to verify the operational readiness of the system. It focuses on performing "Ready for Action" portions of the crew drills, verifying emplacement and initialization criteria, and performing a tactical power changeover. Battery tactics trainer or senior TCA trains the fire control crew members. Launcher section chiefs and platoon sergeant train the launcher crew members. Crew members may be trained in isolation on their particular crew portion or may be trained in conjunction with other crew members performing the complete crew drill.

Standards: Crew members perform applicable "Ready for Action" drills and perform system verification and tactical power changeover.

Table III - Tactics. Table III trains fire control crew members applicable NATO, national, or other contingency command directives, emergency message action cell procedures, and basic air battle management. The training with NATO, national, or other contingency command directives prepares fire control crew members to receive, authenticate, decode, disseminate, and implement alert messages. The PCOFT will prepare the crew member to perform basic air battle management.

Standards: TCOs/TCAs demonstrate basic knowledge of all tactical doctrine by application in a message-passing exercise, entering all firing doctrine parameters into the weapon system, and answering tactical questions while using the system in an air battle situation.

Table IV - Crew member Qualification. Table IV evaluates crew member's tactical and technical proficiency. It is a two part evaluation: part one is a practical "hands on" evaluation of an individual's ability to perform the "Ready for Action" drills, and part two is a written exercise to determine the TCOs/TCAs knowledge and understanding of NATO, national, or other contingency tactics, emergency message action center (EMAC) procedures, and the Patriot system.

Standards: Crew members perform all tasks IAW local tactical procedures, receive at least a satisfactory rating, and score at least 90% on a brigade level tactics test.

Table V - Intermediate Air Defense Operations. Table V trains crews in basic air battle skills. Crews configure the system and direct engagements of hostile targets in different tactical situations under varying conditions, to include daylight and NBC environment and changing communications status.

Standards: Crews take correct tactical actions, enter correct data in all tabs, and engage hostile targets IAW current tactical doctrine.

Table VI - Intermediate March Order and Emplacement Training. Table VI trains the crews (assisted by other crews as required) to march order and emplace the Patriot system and prepare it for tactical operations. Emphasize crew performance and includes supervision of the process by the fire control and launcher platoon leaders. Tasks may be trained on the IRP or LTA. Crew integrity should be strictly adhered to. Focuses on emplacement and march order of the system.

Standards: Crew members march order and prepare system for travel within 45 minutes; and emplace and initialize system ("Ready for Action") within 45 minutes.

Table VII - Intermediate Practice. Table VII combines tasks from Tables V and VI, with the goal being to have the crew conduct an air battle, receive a movement execute order, march order, emplace, initialize and immediately rejoin the air battle. Table VII must be performed satisfactorily prior to a crew advancing to Table VIII for the first time, and will also be performed at some time during the quarter for practice prior to a crew advancing to the quarterly Table VIII validation.

Standards: Battery commander/TCO determines time for march order based on the tactical situation. Crews march order, emplace, and rejoin the air battle within 90 minutes (excluding road time, if any). Engagement commands are obeyed, and all hostile targets are engaged IAW tactical situation. Communication outages are responded to immediately with correct tactical actions. All airspace control means and IFF tables are correctly entered.

Table VIII - Intermediate Qualification. Table VIII qualification, or gate, is evaluated by the battalion S3 and SMT. The crews conduct an air battle, receive a movement execute order, march order, emplace, initialize system, and immediately rejoin the air battle. Table VIII is performed prior to a crew advancing to Tables IX through XII for the first time, and performed quarterly, either for sustainment or for validation in

a Table XII cycle.

Standards: The same as outlined for Table VII.

Table IX - Advanced Air Defense Operations. Table IX trains crews to sustain an air battle under a changing tactical situation, with a changing communication status, in a task force integrated air defense exercise. The focus is on the crew successfully engaging hostile targets and protecting friendly aircraft in a stressful, continually changing, extended wartime environment which may be conducted at night and under NBC conditions.

Standards: Crews take correct tactical actions, enter correct data in all tabs, and engage hostile targets IAW current tactical doctrine outlined in NATO, national, and other contingency directives, under varying tactical, daylight, and NBC conditions.

Table X - Advanced March Order and Emplacement. Table X trains crews (assisted by other crews as required) to march order and emplace the Patriot system and prepare it for firing under nighttime and varying NBC conditions. Emphasizes crew performance and includes supervision of the process by the fire control and launcher platoon leaders.

Standards: Crews march order and prepare system for travel with no undue delay, and emplace and initialize system with no undue delay (time is dependent on the severity of conditions, and road time is not included; normally not to exceed two hours).

Table XI - Advanced Practice. Table XI combines tasks from Tables IX and X, with the goal to have the battalion crew conduct an air battle. One or more batteries receive a movement execute order, march order, emplace, initialize, and immediately rejoin the sustained air battle. Performed prior to a crew advancing to Table XII for the first time, and as required by the commander prior to the annual Table XII certification.

Standards: Battalion commander/S-3 determine the time for march order based on the tactical situation. The crew march order, emplace, and rejoin the air battle within 90 minutes (excluding road time, if any). Engagement commands are obeyed, hostile targets are engaged, immediately respond to communication outages with correct tactical actions, and all airspace control means and IFF tables correctly entered.

Table XII - Advanced Qualification. Table XII is the ultimate evaluation of a battalion's ability to conduct a sustained air battle under any conditions. One or more batteries move and rejoin the sustained air battle. Table XII will normally be

performed as part of an annual battalion FTX, after ICC crews have validated Table VIII.

Standards: The same as outlined in Table XI.

INDIVIDUAL	WEAPONS QUALIFIED		TABLE I	TABLE II	TABLE III					
CREW		M50/60 CREW QUALIFIED				TABLE IV	TABLE V	TABLE VI		
SQUAD										
PLATOON										
CO/TRP/BTRY										
BN/SQDN									TABLE VII	TABLE VIII
CRITICAL GATES							TABLE IV			TABLE VII

REQUIREMENTS										
ACTIVE UNITS	1	1	AS REQUIRED	AS REQUIRED	AS REQUIRED	WITHIN 90 DAYS	100	100	4	4
RESERVE UNITS										

RESOURCES										
OPTEMPO (1) HEMTT 150-KW	45	60							400 216	400 216
AMMUNITION (2,3)										
TADSS			(4,6)		(5)	(5)	(5,6)	(5,6)	(5,6)	(5,6)
RANGES	25M ZERO ARF/MRF (7,8,9)	MG 10M TRANSITION RANGE (10)								
TRAINING LAND KM^2								2	2	2

Figure 9. Gunnery Training Strategy9. Gunnery Training Strategy.

INDIVIDUAL										
CREW										
SQUAD										
PLATOON										
CO/TRP/BTRY										
BN/SQDN	TABLE IX	TABLE X	TABLE XI	TABLE XII	LFX					
CRITICAL GATES	TABLE VIII			TABLE XI	TABLE XII					

REQUIREMENTS										
ACTIVE UNITS	AS REQUIRED	AS REQUIRED	2	2	1					
RESERVE										

RESOURCES										
OPTEMPO HEMTT 150-KW			200 108	200 108	100					
AMMUNITION										
TADSS	(5)	(5)	(5)	(5,6)	(5,6)					
RANGES				360 KM X 240 KM	60 KM X 40 KM					
TRAINING LAND KM^2		60	60	60						

Figure 9. Gunnery Training Strategy (continued).

Legend for Figure 11:

(1) 1 authorized per firing battery.

(2) See ammunition matrix.

(3) 1 missile per battery every 2 years.

(4) PCOFT.

(5) Patriot embedded system consisting of LAT, TMT, TPT.

(6) MRT for MOS 16T.

(7) Automated record fire (M16).

(8) Modified record fire (M16).

(9) Other range requirements: Grenade Launcher Range (M203), Combat Pistol (M9).

(10) For SAW also.

Figure 9. Gunnery Training Strategy (continued).

LEVEL/EVENT	DRILL	MAPEX	TEWT	CELL/STF SEC TNG	TOC EX	STAFF EX	ADX (3)	CPX	STX	LOG EX	CFX	DEP EX	FTX	EXEVAL CTC	JTX	CTX
CREW	100															
SQUAD																
SECTION																
PLATOON																
BATTERY													1	2(1)		
BATTALION		4	4	52	16	16	12	4	4			2	3	2(1)		1(1)
CRITICAL GATE	BASIC CM QUAL							ADX					INT BTRY QUAL	ADV QUAL		

RESOURCES																
OPTEMPO HEMTT 150 KW (2)			140				120 96	40 96	200 216			20	400 216	200 108		100 54
AMMUNITION																
TRAINING LAND KM^2												60	60	60		60
RANGES																
TADSS	(4)			(7)			(5)		(4)				(4)	(4)		

Legend:
(1) May be conducted in lieu of FTX.
(2) 2 authorized per firing.
(3) ADX.
(4) Patriot exercise.
(5) PCOFT.
(6) See ammunition matrix.
(7) MRT.

Note: One live missile every 2 years per battery.

Figure 10. Maneuver Training Strategy10. Maneuver Training Strategy.

SYSTEM: Patriot Advanced Capability Phase III (PAC-3)		DATE: 18 OCT 96	
	COMMENTS		
AGENCY	SUBMITTED	ACCEPTED	RATIONALE FOR NON-ACCOMMODATION
US Army Engineer School ATTN: ATSE-TDN Fort Leonard Wood, MO 65473-5331	0	0	
US Army Ordnance Center and School, ATTN: ATSL-TD-NSS Aberdeen Proving Grounds, MD 21005-5201	0	0	
US Army Signal School ATTN: ATZH-DTN Fort Gordon, GA 30905-5070	0	0	
Letterkenny Army Depot ATTN: SDSLE-ELO Chambersburg, PA 17201	0	0	
Program Executive Office	18	16	NOTE: See comment 1

and 2			
GPALS, ATTN-SFAE-MD-PA-AS-LD Huntsville, AL 35807-3801			
STRICOM ATTN: AMSPI-MC Orlando, FL 32826-3276	3	1	NOTE: See comment 3 & 4
US Army Combined Arms Command ATTN: ATZL-TAI-D Fort Leavenworth, KS 66027-5000	0	0	
US Army Forces Command ATTN: AFOP-TA Fort McPherson, GA 30330-6000	0	0	

Figure 11. Coordination Summary11. Coordination Summary.

SYSTEM: Patriot Advanced Capability Phase III (PAC-3)	DATE: 18 OCT 96		
	COMMENTS		
AGENCY	SUBMITTED	ACCEPTED	NON ACCOMMODATION RATIONALE
US Army Ordnance Missile and Munitions Center and School ATTN: ATSK-TX Redstone Arsenal, AL 35897-6000	2	2	
US Army Logistics Center ATTN: ATCL-TAG Fort Lee, VA 23801-6000	0	0	
US Army Missile Command ATTN: AMSMI-LC-ME-NL Redstone Arsenal, AL 35898	0	0	
US Army Training Analysis Command, ATTN: ATRC-WGB WSMR, NM 88002	0	0	
US Army Training Support Center ATTN: ATIC-DMD	2	2	

Fort Eustis, VA 23604			
Commander	0	0	
6th ADA BDE			
Fort Bliss, Texas 79916-6602			
Director	0	0	
Combat Developments			
ATTN: ATSA-CD			
Fort Bliss, Texas 79916			
TRADOC System Manager	0	0	
TMD, HIMAD			
ATTN: ATSA-TSM-TMD			
Fort Bliss, Texas 79916			
Director	10	8	NOTE: See comment 5 & 6
Combined Arms and Tactics			
Department			
ATTN: ATSA-TAC			
Fort Bliss, Texas 79916			

Figure 11. Coordination Summary (continued).

SYSTEM: Patriot Advanced Capability Phase III (PAC-3)	DATE: 18 OCT 96		
	COMMENTS		
AGENCY	SUBMITTED	ACCEPTED	NON ACCOMMODATION RATIONALE
Chief, RMO ATTN: ATSA-RM Fort Bliss, Texas 79916	0	0	
Chief Distributive Training Division ATTN: ATSA-DTD Fort Bliss, Texas 79916	0	0	
Director OCADA ATTN: ATSA-ADA Fort Bliss, Texas 79916	0	0	
Commander 11th ADA BDE ATTN: AFVJ-CO Fort Bliss, Texas 79916	0	0	

Total	35	29	

NONACCOMMODATED COMMENTS

Comment 1: Patriot Project Office

Page 11, para 8 b & c

Comment: These sections should be deleted entirely, USAADASCH has stated only one configuration will be taught.

Rationale for non-accommodation: USAADASCH will maintain 2 POIs, out of the 12 systems
on-hand for training only 7 have been projected to have the PAC-3 modification.

Comment 2: Patriot Project Office

Page 21

Comment: The Patriot card states the course length is 9 weeks.

Rationale for non-accommodation: According to the ATRRS the correct course is 11 weeks.

Comment 3: STRICOM

Page 2, Para 1.b (2a)

Comment: The document states that PAC-3 changes will impact training and associated training devices, but does not provide specifics on the types of changes nor does it provide the details on which specific devices will be updated and when.

Rationale for non-accommodation: Specific details are listed in the ORD.

Comment 4: STRICOM

Page 4, para 3.d

Comment: There is no indication that this trainer will function in a combined arms environment. No reference is made to other combat, combat support or combat service support functions and how this trainer integrates within the combined arms battlefield.

Rationale for non-accommodation: ADCATT is visioned by USAADASCH as a CATS trainer for the maneuver forces. Patriot modules will not be cost effective for training, example: there is no training value in a BSFV crew seeing a Patriot launcher or battery while out on maneuvers, however a briefing to the BSFV crew to inform them of Patriot coverage will provide training at no cost.

Comment 5: CATD

Page 5, para 3,d, (2)

Comment: Need to add tactical directors and tactical director assistants at

battalion (ICC) level.

Rationale for non-accommodation: Battery level is the key issue being addressed.

Comment 6: CATD

Page 11, para 8, a

Comment: Not true. Patriot was given an increase in funding.

Rationale for non-accommodation: Significant training issues at risk will be a problem if funding is not increased to upgrade all systems to PAC-3.

REFERENCES

1. Materiel Fielding Plan for Deploying the Patriot Air Defense Missile system to TRADOC and FORSCOM Units.

2. Patriot Fielding Support Plan, 28 February 1985.

3. Consolidated New Equipment Training Plan, Volume II.

4. Table of Organization and Equipment 44-635L000, 44-636L000 and 44- 637L000, Air Defense Artillery Battalion, Patriot, October 1985.

5. Patriot Advanced Capability Phase III (PAC-3) Operational Requirements Document (ORD), May 1992 (Vers 1.2, Dec 93) .

6. Patriot Advanced Capability Phase III (PAC-3) System MANPRINT Management Plan (SMMP), Mar 1994.

Figure 12. References12. References.

APPENDIX A A

LIST OF ACRONYMS AND ABBREVIATIONSAND ABBREVIATIONS

A

AADCOM - - - - - - - Army Air Defense Command
ABT - - - - - - - - - air breathing threat
AC - - - - - - - - - active component
alternating current
air conditioner
ACCP - - - - - - - - Army Correspondence Course Program
AD - - - - - - - - - air defense
ADA - - - - - - - - - air defense artillery
ADB - - - - - - - - - air defense battle
ADT - - - - - - - - - air defense table
ADX - - - - - - - - - air defense exercise
AIT - - - - - - - - - advanced individual training
AMC - - - - - - - - - Army Material Command
AMG - - - - - - - - - antenna mast group
AMIM - - - - - - - - Army Modernization Information Memorandum
ammo - - - - - - - - ammunition
AMTS - - - - - - - - active maintenance trainer simulator
AOC - - - - - - - - - area of concentration
AR - - - - - - - - - Army regulation
ARM - - - - - - - - - anti-radiation missile
ARTEP - - - - - - - - Army Training and Evaluation Program
ASI - - - - - - - - - additional skill identifier
ATLP - - - - - - - - Armywide training literature program
ATM - - - - - - - - - Antitactical missile
ATSC - - - - - - - - Army Training Support Center

B

BITE - - - - - - - - built-in test equipment
bn - - - - - - - - - battalion
BOIP - - - - - - - - basis of issue plan
BTOC - - - - - - - - battalion tactical operations center
btry - - - - - - - - battery
BTU - - - - - - - - - British thermal unit

C

CAD - - - - - - - - - course administration data
CATS - - - - - - - - combined arms training strategy
CD - - - - - - - - - combat development/developer
CDI - - - - - - - - - classification, determination, &

identification
cdr - - - - - - - - - commander
CFX - - - - - - - - - combined field exercise
CM - - - - - - - - - crew member
CMT - - - - - - - - - common military tasks
CO - - - - - - - - - commanding officer
COEA - - - - - - - - cost and operational effectiveness analysis
COL - - - - - - - - - colonel
commo - - - - - - - - communication(s)
COFT - - - - - - - - conduct of fire trainer
CPAS - - - - - - - - command post automation system
CPX - - - - - - - - - command post exercise
CR - - - - - - - - - camera-ready
CRG - - - - - - - - - communications relay group
CT - - - - - - - - - collective training
CTC - - - - - - - - - combat training center
CTEA - - - - - - - - cost and training effectiveness analysis
CTT - - - - - - - - - common task training
CTX - - - - - - - - - combined training exercise

D

DA - - - - - - - - - Department of the Army
DAAPP - - - - - - - - Department of the Army Audiovisual Production Program
DAVIPDP - - - - - - - DA Visual Information Production and Distribution Program
DB - - - - - - - - - drill book
DCD - - - - - - - - - Directorate of Combat Development
DEPEX - - - - - - - - deployment exercise
dev - - - - - - - - - devices/development
DLU - - - - - - - - - data link upgrade
DPWL - - - - - - - - Directorate of Public Works and Logistics
drvr- - - - - - - - - driver
dsl eng - - - - - - - diesel engine
DSN - - - - - - - - - defense service network
DT - - - - - - - - - development testing
DTIP - - - - - - - - doctrine and tactics impact packet
DTM - - - - - - - - Director of Training Management
DTT - - - - - - - - doctrine and tactics training

E

ECM - - - - - - - - - electronic counter-measures
ECS - - - - - - - - - engagement control station
EIDS - - - - - - - - electronic information delivery system
EMAC - - - - - - - - emergency message action center
eng - - - - - - - - - engine
EOD - - - - - - - - - explosive ordnance disposal

EPP - - - - - - - - electric power plant
EPU - - - - - - - - - electric power unit
equip - - - - - - - - equipment
ERT - - - - - - - - - empty round trainer
ESB - - - - - - - - - evaluation and standardization branch
ET - - - - - - - - - embedded trainer
ETM - - - - - - - - - extension training materials
EWCC - - - - - - - - enhanced weapon control computer
EX - - - - - - - - - exercise
exam - - - - - - - - examination
EXEVAL - - - - - - - exercise evaluation

F

FDC - - - - - - - - - fire direction control
FEA - - - - - - - - - front end analysis
FM - - - - - - - - - field manual
FMS - - - - - - - - - foreign military sales
FP - - - - - - - - - firing platoon
FP/FP - - - - - - - - firing platoon/firing platoon
FPOPS - - - - - - - - firing platoon operations
FT - - - - - - - - - Fort
FTX - - - - - - - - - field training exercise
FU - - - - - - - - - fire unit
FUE - - - - - - - - - first unit equipped
FY - - - - - - - - - fiscal year

G

gen set - - - - - - - generator set
GEM - - - - - - - - - guidance enhanced missile
GM - - - - - - - - guided missile
GMT - - - - - - - - - guided missile transporter

H

HEMTT - - - - - - - - heavy expanded mobility tactical truck
HHB - - - - - - - - - headquarters and headquarters battery
HW - - - - - - - - - hardware
Hz - - - - - - - - - hertz

I

IAW - - - - - - - - - in accordance with
I&KP - - - - - - - - instructor and key personnel

I&KPT - - - - - - - - instructor and key personnel training
ICC - - - - - - - - - information and coordination central
ID - - - - - - - - - identification
IET - - - - - - - - - initial entry training
IFF - - - - - - - - - identification, friend or foe
ILSMP - - - - - - - - integrated logistics support management plan
IM - - - - - - - - - intermediate maintenance
INIT- - - - - - - - - initialization
INT - - - - - - - - - integrated
IOT&E - - - - - - - - initial operational test and evaluation
IRP - - - - - - - - - initial release point
ITP - - - - - - - - - individual training plan
IVD - - - - - - - - - interactive video disk

J

JTIDS - - - - - - - - joint tactical information distribution system
JTX - - - - - - - - - joint training exercise

K

km - - - - - - - - - kilometer
kw - - - - - - - - - kilowatt

L

LAT - - - - - - - - - live air trainer
LCSMM - - - - - - - - life cycle systems management model
ldr - - - - - - - - - leader
LIN - - - - - - - - - line item number
LS - - - - - - - - - launching station
LTA - - - - - - - - - local training area

M

MACOM - - - - - - - - major Army command
maint - - - - - - - - maintenance
MAJ - - - - - - - - - major
MAPEX - - - - - - - - map exercise
MD - - - - - - - - - Maryland
METL - - - - - - - - mission essential task list
MICC - - - - - - - - master information and coordination central
MICOM - - - - - - - - Missile Command
MMM - - - - - - - - - multimode missile

MNS - - - - - - - - mission needs statement
MO&E - - - - - - - - march order and emplacement
MOS - - - - - - - - military occupational specialty
MQS - - - - - - - - military qualification standard
MR - - - - - - - - missile round
MRT - - - - - - - - missile round trainer
MSE - - - - - - - - multisubscriber equipment
msl - - - - - - - - missile
MSU - - - - - - - - mass storage unit
mtd - - - - - - - - mounted
MTM - - - - - - - - masked terrain mapping
MTP - - - - - - - - mission training plan

N

N/A - - - - - - - - not applicable
NATO - - - - - - - - North Atlantic Treaty Organization
NBC - - - - - - - - nuclear, biological and chemical
NCO - - - - - - - - noncommissioned officer
NET - - - - - - - - new equipment training
NETP - - - - - - - - new equipment training program
NOFORN - - - - - - - no foreign

O

OAC - - - - - - - - officer advanced course
OBC - - - - - - - - officer basic course
OCADA - - - - - - - - Office of Chief of Air Defense Artillery
OMMCS - - - - - - - - Ordnance Missile Munitions Center and School
OPS - - - - - - - - operations
OPTEMPO - - - - - - operating tempo
ORD - - - - - - - - operational requirements document
OSLB - - - - - - - - operational search lower bounds
OTM - - - - - - - - on-line training mode

P

PAC-3 - - - - - - - - Patriot advanced capability phase III
pam - - - - - - - - pamphlet
PCOFT - - - - - - - - Patriot conduct of fire trainer
PDB - - - - - - - - post deployment build
PDU - - - - - - - - power distribution unit
PH - - - - - - - - phase
phys - - - - - - - - physical
PIMIT - - - - - - - Patriot intermediate maintenance institutional trainer
PLGR - - - - - - - - precision lightweight global positioning system receiver

PMCS - - - - - - - - preventive maintenance checks and services
POI - - - - - - - - - program(s) of instruction
POMT - - - - - - - - Patriot organization maintenance trainer
POS ID - - - - - - - positive identification
PTT - - - - - - - - - part task trainer

Q

QQPRI - - - - - - - - qualitative and quantitative personnel requirements information
QRP - - - - - - - - - quick response program

R

RC - - - - - - - - - reserve components
RDR ENH - - - - - - - radar enhancement
reg - - - - - - - - - regulation
RLRIU - - - - - - - - routing logic radio interface unit
RS - - - - - - - - - resident school/radar set
RSP - - - - - - - - - render safe procedure
RSU - - - - - - - - - recovery storage unit

S

SAW - - - - - - - - - squad automatic weapons
SC - - - - - - - - - specialty code
SD - - - - - - - - - sweepdown
sec - - - - - - - - - section
SIP - - - - - - - - - system improvement plan
SM - - - - - - - - - soldier's manual
SMMP - - - - - - - - system MANPRINT management plan
SMT - - - - - - - - - system maintenance technician
SOE - - - - - - - - - state of emission control
SSI - - - - - - - - - specialty skill identifier
ST - - - - - - - - - student text
STAFFEX - - - - - - - staff exercise
STF - - - - - - - - - staff
STP - - - - - - - - - soldier training publication
STRAP - - - - - - - - system training plan
STX - - - - - - - - - situation training exercise
SW - - - - - - - - - software
sys - - - - - - - - - system

T

TACI - - - - - - - - tactical initialization
TADSS - - - - - - - - training aids, devices, simulations, and simulators
TBM - - - - - - - - - tactical ballistic missile
TCA - - - - - - - - - tactical control assistant
TCO - - - - - - - - - tactical control officer
TD - - - - - - - - - training development/developer/device
tactical director
TDA - - - - - - - - - tactical director assistant
TDORD - - - - - - - - training device operational requirement document
TEA - - - - - - - - - training effectiveness analysis
TEMP - - - - - - - - Test and Evaluation Master Plan
TEWT - - - - - - - - tactical exercise without troops
TF - - - - - - - - - training film
TG - - - - - - - - - trainers guide
tlr mtd - - - - - - - trailer mounted
TM - - - - - - - - - technical manual
TMT - - - - - - - - - terrain mapping trainer
tng - - - - - - - - - training
TOC - - - - - - - - - technical orientation course
tactical operations center
TOCEX - - - - - - - - tactical operations center exercise
TPT - - - - - - - - - troop proficiency trainer
TPW - - - - - - - - - training program worksheet
TRADOC - - - - - - - United States Army Training and Doctrine Command
TRAS - - - - - - - - training requirements analysis system
trk - - - - - - - - - truck
TSM - - - - - - - - - test site manager/TRADOC system manager
TSP - - - - - - - - - test support plan
TTP - - - - - - - - - tactics techniques and procedures
TTSP- - - - - - - - - training test support plan
TX - - - - - - - - - Texas

U

UHF - - - - - - - - - ultra high frequency
USAADASCH - - - - - US Army Air Defense Artillery School
USAES - - - - - - - - US Army Engineer School
USAOC&S - - - - - - - US Army Ordnance Center and School
USAOMMCS - - - - - - US Army Ordnance Missile and Munitions Center & School
USASC&FG - - - - - - US Army Signal Center and Fort Gordon
USATSC - - - - - - - US Army Training Support Center

V

VA- - - - - - - - - - Virginia

VT - - - - - - - - - video tape
veh - - - - - - - - - vehicle

W

WCC - - - - - - - - - weapon control computer
WO - - - - - - - - - warrant officer
WOTS - - - - - - - - warrant officer training system
WOTTCC - - - - - - - warrant officer technical/tactical certification course